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To better understand the medical internship, a required and critical part of the educational preparation of young physicians, and its relevance for their future careers, the experience of interns on the Harvard Medical Service at the Boston City Hospital was documented. The principal method used to gather information was participation in and observation of the daily activities of an internship, in the clinics, wards, meetings and lectures. During the 18-month investigation, hypotheses were formulated and tested by further observation and direct questioning. To compare the experience of Harvard interns with the internship program at another hospital, 3 months were spent as a participant/observer at a community hospital. An objective test, a questionnaire and the National Board of Medical Examiners examination were also evaluated. Although most interns aspired to careers in teaching or research, they and advisors agree that a straight medical internship should be served, preferably at a university-affiliated hospital. There, because of heavy demands, their work consists almost entirely of attending patients. To reconcile directing their efforts toward patient care rather than formal academic learning, interns justify their work as an educationally beneficial clinical experience. They thus reduce the conflict between their own academic desires and the hospital's purpose. "Learning the ropes" is a crucial factor in an intern's success. Although the work of the internship at the university and the community hospital was similar, the programs differed because of conditions and objectives. (JS)

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THE EDUCATIONAL EXPERIENCE OF INTERNS

COOPERATIVE RESEARCH PROJECT NO. 2596
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STEPHEN J. MILLER
BRANDEIS UNIVERSITY
WALTHAM, MASSACHUSETTS

1968

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There is no way to adequately do so, but I must acknowledge the influence of Arnold M. Rose. His excellent counsel and sympathetic criticism of my efforts have improved all that I have tried to do. There is also no way to adequately acknowledge the patience and tolerance of my wife, Roberta. I can only say that it is important to have a wife who will not only tolerate, but accept the hours that must be spent away from home.

Finally, I appreciate the good humor and assistance of the interns with whom I spent my time in the field. The fact that they had a great deal of work to do never prevented them from participating in the study. I want them to know that I know how generous they were, and I appreciate all that they did for me. For that reason, this report is not only about but for the interns of the Harvard Medical Services at the Boston City Hospital.

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Waltham, Massachusetts
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CHAPTER 1.

THE INTERN'S CAREER IN THE MEDICAL ELITE

A society like ours needs many services that can be provided only by specially trained people. More than ever before we depend on highly trained professionals; we delegate to them the responsibility for applying knowledge and allow them to define for us matters pertaining to their work. Much of our way of living is influenced by the decisions and practices of one or another of the professions.

We often assume that the professions comprise groups of people who agree on their essential purpose. Unanimity, however, is no more a characteristic of professionals than of any other large numbers of people. While some may accept one definition of the nature of their profession, others may feel that some other definition best serves society's needs. For example, consider medicine the prototype of the professions. Some physicians believe its purpose to be the scientific investigation of disease; they choose careers of teaching and research at medical schools. Others think teaching and research are less important than applying what knowledge we already have. These physicians choose to practice medicine in the community. Thus we see not one but many groups of physicians, each with an ideology and careers of its own. Such differences of opinion and variety of careers operate to divide each profession into subgroups whose members are more like one another than like the members of other subgroups within the same profession.

A professional career begins only after long years of training and study. During the training years candidates for a profession learn its sciences and techniques, choose specific careers that they want for themselves, and acquire the ideology of an appropriate subgroup. An ideology consists of attitudes and opinions regarding the relative value of the different kinds of work the profession claims as its own and the relation of careers organized around particular work to other groups within the profession, other occupations, the public, and the institutions of society. When we attempt to understand the part a profession plays in our society, we must consider the processes by which its members are recruited, trained, and distributed among the subgroups that make decisions and change or maintain practices that affect us.

Sociologists interested in the phenomena of professions have conducted many studies of medicine. I am reporting one such study. My specific concern is with the processes by which candidates for the medical profession are recruited and trained during a phase of their education and the implications of that recruitment and training for their subsequent careers in medicine. Although this is, in a sense, a study of medical education, it is not an attempt to evaluate quality of training but to describe and interpert sociologically a particular point in the progress of young men toward careers in medicine.

The young men I observed were medical school graduates serving internships at the Harvard Medical Unit of the Boston City Hospital, a place noted for training physicians for teaching and research. Among the questions I asked are; What are the planned and unplanned experiences they have during the internship year? What kinds of problems do interns face, and how do they solve them to their satisfaction and the satisfaction of those with whom they work? I have also tried to clarify the processes by which young men make their way to and take the first step on the ladder of academic rather than other kinds of medical careers.[1]

When available positions are defined in relationship to one another, a career ladder exists within an occupation or profession. While the career ladder of a medical practice is not so obvious as, for example, that of the academic world, practicing physicians "may be organized into many distinct levels which indicate clearly the prerogatives and prestige of the men concerned and provides an exceedingly large number of steps for the new member of the profession." A medical career begins with new members being admitted to positions of least responsibility and continues for as long as they hold those positions or, for whatever reasons, move on to different or higher stations in medicine. Sociologists have studied "successful" careers, observing how men entering at the bottom obtain positions of increasing responsibility and prestige that move them to the top of a profession.

We know little about why some men choose academic rather than practicing careers. We know even less about how they gain access to postions with which to begin those careers. My study suggests that individual medical careers are outcomes of circumstances at medical schools and hospitals, which directly represent the social organization of the medical profession. It is these circumstances that we shall examine here.

This implies some theory, or at least a rationale for interpreting observations. A particular sociological approach does serve as a framework for the study. Most sociological concepts will be used in the common way, but a few differ from common usage. Some definitions are in order before we proceed further.

The Professional Elite

My meaning of the concept of the professional elite will require some explanation. That concept evolved during fieldwork, as my associates and I tried to explain the particular place of the Harvard Medical Unit in medicine and the implication of its existence for medical careers.

Sociologists have approached the professions in one of two ways. One has been to assume that professions are homogeneous work groups whose members agree on what their work should be and share interests, attitudes, and values that directly represent the purpose of their profession.[2] The second approach assumes that professions are heterogeneous, encompassing not one but many work groups with the same occupational title.[3] Though an idealized career may symbolize the profession, each groups controls careers organized around specific knowledge, particular skills, special interests, and unique purposes.

Although there are arguments for both approaches, an emphasis on homogeniety overlooks much of what we do know about professions, for example, the obvious differences among specialists and the conflict of interest between academicians and practitioners. I have, therefore, chosen the latter approach as the framework for my study.

As I see it, a profession is made up of a number of groups whose members attempt to obtain or maintain institutional positions that advance their special interests and facilitate the purpose of the group to which they belong. These subgroups are circles of colleagues who share an identity and an ideology that lead them to organize their professional activity in similar ways. When referring to the organization of professions, I have in mind this phenomenon. The organization of which I speak is determined by the activities and tactics of the segments.

The segments of a profession are not all the same kind. There are established segments whose claims have been recognized by the profession; their members have high status and usually hold institutional positions of power. Other subgroups are not so well established, but are recognized. Some segments are only emerging. These emerging segments attempt to gain recognition and obtain appropriate positions for their members. At any particular period in the history of a profession these different kinds of groups are engaged in activities and tactics that will entrench them further or establish them in the profession.

This view of professions as amalgomations of segments standing in some relationship to one another with respect to prestige and power leads us to consideration of the professional elite. "For every epoch and for every social structure," wrote Mills, "we must work out an answer to the question of the power of the elite."[4] Who are the elite within a profession? Why are they an elite? What is the basis of their status? Once established, how do they maintain their position?

At any given time in any profession, there are distinguishable segments with the most prestige and power, others with less, and some with little if any stature other than what they have as a part of the profession. To those segments with prestige and power we give the title "elite."[5]

When the members of a segment hold influential positions in the institutions of the profession, they acquire power. But power is not the only attribute of a professional elite. Today, the accumulated knowledge of any profession is so great that the members of any one segment cannot claim to know it all. They do, however, possess the knowledge relevant to the interests and purposes of their segment. Thus, in matters pertaining to its special interest, any one segment is intellectually superior to the other segments of the profession.

Power and intellectual superiority go hand in hand, and both are essential attributes of segments that emerge as the elite of a profession. Without a recognized claim to intellectual superiority in a branch of the profession a segment would be denied power. On the other hand, segments with power are best able to maintain and enforce their claims to intellectual superiority. By so doing, they advance their interests and accomplish their purpose within the profession.

The professional elite, then, may be defined as those members of segments with recognized claims to intellectual superiority who hold positions of power in the institutions of a profession. Each member of the elite owes his position to his relationship with a segment, and his activity has meaning for him and others in terms of the avowed purpose of his segment. As a group, they are colleagues who have common interests and a purpose that leads them to wield power to guide the decisions and practices of their profession, supposedly for the good of all.

One may think that an elite so defined is simply another segment. This is not so. Segments may have power, or no longer have power. The elite always has power to influence the profession's decisions and practices. This is not to say that the elite is unchanging. Rather, the membership of the elite may vary as circumstances undermine the claims of established segments and support those of emerging segments. Those segments that Bucher and Strauss refer to as "pockets of resistance and embattled minorities,"[6] are, to my way of thinking, counter-elites whose members will, in time, displace members of other segments who are among the elite, making other decisions and effecting new practices. The elite as a phenomenon, however, persists.

Briefly, there are two segments common to almost all other divisions of professions: the academic and the practice. The academic segment, whose members have what may be called scientific interests, see their purpose as primarily the acquisition and communication of knowledge. The practice segment applies knowledge as a service. Since professions are founded on some esoteric knowledge, it could be expected that those who excel at research and teaching would be set apart from the mass of those practicing the profession. Members of the academic segment hold the positions at the training institutions. A respect for scientific authority has justified the claims of some occupations to the title of "profession," and there is every reason to believe that such respect, so much a part of the institutions of professions, would also serve among the scientifically trained to justify the existence of an elite.

For my purpose, I assume that members of contemporary elites come from the academic segments. Others, however, would argue that the professionals of influence are the practicing ones. That argument overlooks significant facts about the organization of professions: Today, professions are rooted in institutions, and the policies and practices of those institutions are determined by men who occupy more or less permanent places in them. These are the men who wield sufficient power to influence decisions and practices that affect a profession.

Members of the professional elite are on the career ladders of established segments. They have that status only so long as the segments to which they belong have a reputation for superiority and control access to the career ladders of their branch of the profession. I have indicated why the reputation of the academic segment may be assumed to be greater than that of the practice segment of any branch of the profession. Moreover, the academic segment holds the best positions from which to control access to career ladders positions at the training institutions. Bucher and Strauss have noted the importance of these positions for segments:

> Segments are in competition for the allegiance of students: entire schools as well as single departments can be the arena of, and weapons in, this conflict [and] during their professional training, students pick their way through a maze of conflicting models and make momentous commitments thereby.[7]

The recruitment, socialization, and careers of professionals are determined by the segments at the training institutions. When they recruit and train young men and women for careers that represent commitment to their own interests and purposes, the academic segments are also preparing new members for the elite.

The phrase "professional elite," to paraphrase Mills, refers to those circles of colleagueship in which decisions are made that affect professions.[8] The members of this elite need not personally take part in every decision; they need only be among those whose opinions are taken seriously by persons making decisions.

As more and more professional activity-including practice-is located in institutions, practitioners may make up more of the elite than they do now.[9] At present, however, its membership consists almost entirely of occupants of institutional positions as researchers, teachers and administrators. The elite of American medicine comprises physicians occupying positions at "name" medical schools and

and hospitals which enable them to influence the teaching and the practice of medicine throughout the United States. I refer to "name" schools and hospitals in the sociological sense and imply no judgment of their quality. Simply, they are institutions that need no further identification than the name: Harvard, Johns Hopkins, Columbia, Chicago, Pennsylvania, and a dozen or more schools generally accorded public esteem for the notable contributions of their scientists or the excellence of their teachers, students and graduates. The public esteem for these schools makes them the celebrities of American medicine, and the physicians at these places are among the leadership of the medical elite.

At these medical schools and the hospitals affiliated with them, usually referred to as teaching hospitals, physicians are grouped by specialties into departments. Each department has among its members some practitioners, but the members of the academic segment far outnumber them, and, they are the ones who decide matters pertaining to teaching, research, and administration. Since the academicians set the patterns for recruitment and socialization into the medical profession, they also define a route that candidates for academic careers must travel by deciding the kinds of experiences they will have along the way.

All such routes consist of subordinate positions at schools and hospitals. A candidate seeking one rather than another medical career must travel a route of positions and experiences appropriate for that career. For academic careers, the route begins with the obtaining of a university-affiliated internship and continues through the "right" residency to teaching and research positions of some responsibility at medical schools and teaching hospitals.

When choosing internships, medical students are aware of the routes that exist. Students who plan to have a traditional career are concerned only with obtaining internships that will provide them with practical experiences, preparing them for the general practice of medicine. Their internships can be served at general hospitals. Those who plan to specialize know that the internship is but the first of several years of training, and that they must serve residencies of the right sort before they will be permitted careers of specialized practice. Almost any internship will do so long as it leads to an approved residency for the desired specialty. By contrast, students who include research and teaching in their future plans attach a great deal of importance to internships at university-affiliated hospitals. This kind of internship is a necessary prelude to a residency that is "right" for a career dependent upon connections with medical schools and teaching hospitals.[10]

The candidates who follow these routes to academic careers have educational experiences of two kinds: (1) learning in the strict sense, acquiring knowledge and skill appropriate for a specialized practice; and (2) learning in the social sense, developing an identification with and commitment to a particular segment in a specialty of the medical profession. Some of these men will go the whole academic route and become members of the medical elite.

Levels and Direction of Effort.

What I have said so far indicates the context in which I will discuss Harvard internships. Much of what follows, however, has to do with the experiences of young men after they presented themselves on the wards of the Boston City Hospital. The training of physicians is, of course, only one of the objectives of the hospital. At most hospitals training is subservient to the primary objective of providing service to patients. In fact, internships enable hospitals to hire physicians at little cost to attend patients. Interns trade the time they spend attending patients for the experiences required of licensed physicians. An internship, then, is much like an apprenticeship. It is complicated by the fact that its purpose is not only to train people for medical careers but also to use them to do work essential to the profession.

All internships are combinations of academic and practical activities. Some have more of one kind than the other, depending on the hospitals in which they are served. As programs of training, they consist of lectures, conferences, and meetings with practicing physicians. In addition, interns must assume responsibility for admitting, examining, prescribing, and caring for the patients assigned to them. Complicating the life of the intern even more is the fact that he must work with members of other occupations at the hospital. They have their own work to do and act to produce working conditions and relationships that facilitate that work. Other workers cannot be expected to arrange their work for his convenience.

The academic and practical experiences of an internship are not necessarily compatible. An effort to attend all lectures, conferences, and meetings may leave little time to do the things that must be done for patients. On the other hand, not all patients contribute to learning. Many patients have the same illness, and attending to them may not provide any new experience relevant for an internship as interns see it. In such circumstances as I have described, an internship is a "problematic situation," requiring the intern to coordinate his efforts so as to meet both his need to learn and the demands of the work required of him.

The young men who serve internships are highly motivated and anticipate doing a great deal of work. Many think they will be able to do it all. But as they try, they learn the facts of working in institutions. The conflicting demands of their situation and the expectations of those with whom they work soon lead them to realize that everything cannot be done and, no matter what is done, not everyone will be satisfied with their efforts. When interns confront this dilemma, they attempt to determine what is an acceptable effort and tacitly agree among themselves to take that level as their standard for how much to do and on what things to exert effort during the year. This agreed-upon standard, then, becomes the level and direction of effort of interns at the hospital.

For the purpose of analyzing the level and direction of effort, I use the concepts of interactionist sociology,[11] which assumes that human behavior is reciprocal. People influence others and, in their turn, are influenced by those with whom they interact. In any work situation, people determine a course of action more or less in accord with what others expect and define as appropriate. Although I had no specific hypotheses, I was committed to the idea that interns would solve the problems they faced by organizing their activity in accord with the expectations of residents, physicians, nurses, and others with whom they had to work. What I observed were groups of people who interacted with interns, and the ways in which those groups affected the interns' level and direction of effort by controlling the circumstances in which interns must learn and work.

Some important features of the intern's experiences are specific to his immediate social situation in the training hospital: (1) the work that others do, particularly, when it conflicts with the stated purpose of an internship and requires some sort of unique arrangement between intern and other personnel; (2) the power that various work groups have and the ways in which they exercise that power to affect circumstances that facilitate their own work and establish working relationships in keeping with the way they think things should be done. These features become major determinants of interns' level and direction of their effort and energy.

In my analysis of levels and direction of effort, I am concerned with the group perspectives that influence interns as they choose among the many things they could do and decide on particular ways of doing them. People who face many of the same problems frequently have much the same definition of their situation and, in response, evolve a similar course of action. This collective view of and behavior in a particular situation is called a group perspective.

Perspectives, of course, may be long or short. Long range perspectives are those that brought the individual into the present situation, for example, the belief that a university-affiliated internship is a prelude to the "right" residency. Faced with specific immediate problems, the intern develops a short-run perspective. Although both kinds will be discussed, I am more concerned with short-run perspectives and deal with long-range goals only as they influence the immediate situation at the training hospital.

In addition to describing the short-run perspectives, I will attempt to analyze the circumstances in which they arise and the mechanisms by which other hospital work groups play a part in shaping them. These mechanisms--the ideas and actions of others at the hospital--present problems for interns, place restraints on the kind of perspective they develop and in other ways influence their thinking and action. The operating perspective that finally emerges will be the result of interaction between interns and other medical personnel.

The intern is dependent on others because they have information he needs or are in positions to provide services that would facilitate his work. He is not, however, without information of his own, and he has the potential to a valuable resource. He does, for example, know the patient and can tell other things they need to know in order to do their own work. These circumstances lend themselves to a model of interaction as social exchange.[12] In terms of a theory of behavior as exchange, we may assume that the efforts of interns and others to do their work satisfactorily will result in a network of relationships in which the conditions are shaped by the exchange of information, services, and other social goods.[13] The exchanges that are negotiated will be related to the circumstances of the work setting. The investments and pay-offs of such relationships would be the crux of a perspective, and actual exchanges the action taken to coordinate effort.

FOOTNOTES

1. Oswald Hall, "The Stages of a Medical Career," *American Journal of Sociology*, 53, 5 (March, 1948), pp. 327-336. Also, "The Informal Organization of Medical Practice in an American City," University of Chicago, 1944.

2. For example, Robert K. Merton *et al*., *The Student Physician* (Cambridge, Mass.:Harvard University, 1957).

3. Rue Bucher and Anselm Strauss, Professions in Process, *American Journal of Sociology*, LXVI (January, 1961), pp. 325-334.

4. C. Wright Mills, *The Power Elite* (New York: Oxford University Press, 1957), p. 23.

5. Not all sociologists agree that those with power are the elite. Some, e.g., Karl Mannheim, *Man and Society in an Age of Reconstruction*, argue that these are groups that have no power, or have not yet obtained power, but are influential in shaping a society. Others argue that differences in power are essential to making a distinction between the mass and the elite. See H. D. Lasswell and A. Kaplan, *Power and Society* (New Haven, Yale University Press, 1950). None, however, deny that power is an attribute of the elite.

6. Bucher and Strauss, *op*. *cit*., p. 333.

7. Bucher and Strauss, *op*. *cit*., p. 334.

8. C. Wright Mills, *The Power Elite* (New York: Oxford University Press, 1957), p. 290.

9. There are examples of this happening in professions. For example, see Bucher, *op*. *cit*., "The Emerging Practitioner Movement," pp. 43-47.

10. Howard S. Becker, Blanche Geer, Everett C. Hughes, and Anselm Strauss, *Boys in White*, (Chicago, University of Chicago, 1961) pp. 384-400, discuss the choice of an intern in the way I have described.

11. The rationale for my study is very much the same as that used by Becker, Geer, Hughes, and Strauss, *op*. *cit*.

12. Stephen J. Miller,"Exchange and Negotiated Learning in Graduate Medical Education." *Sociological Quarterly* (Fall 1966), pp. 469-479.

13. George C. Homans, "Social Behavior as Exchange," *American Journal of Sociology*, 63:597-606 (1958).

CHAPTER 2.

PARTICIPANT OBSERVATION IN A MEDICAL SETTING

Although I made some assumptions when I undertook this study, I had no presumptive notions of how interns would organize their activities, or any specific hypotheses of how other hospital personnel might influence the level and direction of their efforts. The assumption that the actions of interns would be a product of their interaction with others at the hospital did not necessarily allow specification of hypotheses in advance of actual data regarding the relationships among those people. Assuming, as I did, that the character of the Harvard Medical Unit would be emergent, a result of the interaction among people, it would be illogical to postulate about the place as if it were a constant set of relationships dictated by the prescriptions of medical education. My research problem, as I originally saw it, was to discover the patterned relationships by observing what actually did happen to young men during a year at the Boston City Hospital.

The problem led me to adopt the research method of participant observation. Simply, I put on a white coat and took part in the interns' daily life. I went where they went and, whenever possible, did what they did. The study extended over 18 months. During that time I openly observed what happened, listened to what was said and questioned people at the hospital. As I gathered data, it became obvious that the internship could not be divorced from the matrix of the Harvard Medical Unit and its place in American medicine. My experiences there and elsewhere led me to the subconcept of the medical elite.

The most important source of data was direct observation of interns' and others' behavior on the wards, at clinics, and during conferences, lectures and meetings. A great deal of my time was spent walking around and talking casually with interns as they worked. After introducing myself to the staff, I was able to walk freely into the ward and join a group of interns. Frequently I selected a single intern and spent a day with him. If, for example, he left the ward to attend a conference, I went with him. While he was on the ward, I watched whatever he was doing. Thus I could observe activity directly and ask on-the-spot questions about what interns did and why they did it.

I had no problem gaining entry to the Harvard Medical Unit; my study had the physicians' approval. Two Harvard physicians who participated in the initial planning continued to serve as consultants throughout my stay at the Boston City Hospital. Needless to say, it would have been impossible to conduct the study without their consent and support of my work. I am gratful that the physicians with whom I collaborated understood that they could best assist me by allowing me to make my own way at the hospital, while affording me the benefits of their knowledge and years of experience in medicine. Other physicians, trying to be helpful, suggested specific topics they thought would interest me, but at no time did any physician place any restriction on where I could go or attempt to limit my inquiry in any way. Once satisfied that I had a legitimate purpose, they did not interfere. I was free to observe and talk to anyone who might give me information or otherwise assist my study.

Although I had no trouble getting in, I did have a problem establishing myself as an independent observer. People could not at first accept me without fear that I was a spy or gathering information for a report similar to Abraham Flexner's.[1] I also had some trouble fitting into the hospital routine. At the beginning, when I did join an intern for the day, he would often stop what he was doing so we could talk. Since I wanted to observe the content of his daily work, his attempts to cooperate with me defeated my purpose. I therefore had to find ways to fit myself into his routine without interrupting him. Although I made every effort not to be, at the outset of my fieldwork I was in the way, because there was nothing for me to do.

No attempt was made to keep my study a secret, and interns knew I was there to observe and question them about their experiences. Therefore it was important to know how people saw me and whether they believed that certain kinds of information and events should be kept from me. In that regard, my first days in the field were uncomfortable. When I approached, conversations would stop, or groups would disperse, or interns would try to lose me in the corridors. More than one intern asked me to wait for him and never returned. Experiences of this sort are often reported by participant-observers attempting to establish themselves in an organization or community. I was an intruder, and people felt ill at ease with me until they determined to their own satisfaction who I was.

My problems in the field were greater than could normally be expected. When I began my work, I did not know about an existing conflict between house officers and the hospital administration. That conflict, I later learned, was one of the factors contributing to my initial difficulty. In 1964 administrators were having difficulty with an organization of interns and residents at the hospital. Many had complained about antiquated facilities, insufficient nursing personnel and inadequate salaries. The House Officer's Association had recently negotiated a salary raise and had retained lawyers to negotiate for further increases, additional parking, and improvement of working conditions. A committee representing interns and residents had raised these issues with the administration. At the time, several official accrediting bodies were reviewing the hospital's facilities and the type and quality of its services. Although the focus of these investigations was not the quality of the training offered, the Internship Review Committee of the Council of Medical Education, which was concerned with the quality of training, would take their findings into consideration when approving training programs at the hospital. In other words, much of what was happening could jeopardize the program's approved status. The House Officer's Association was actively attempting to inform the public about working conditions at the hospital, but many interns and residents were understandably fearful of finding themselves training at a hospital that was not approved. Thus I entered the hospital at a less than opportune time to begin my study.

My field work was made still more difficult by some unwanted publicity. Local newspapers reported that I had been "selected as personal observer," to "record all aspects of the internship, ranging from the interns' attitude toward his superiors, fellows, and library facilities, to his level of medical knowledge, diagnostic ability, therapeutic skill and management competence."[2] The publication of a similar item in a newsletter published by the hospital for employees and staff served to identify me with the administration.[3]

Since I had entered the hospital at a time when people were suspicious of strangers, this publicity may have identified me with the hospital administration or the accrediting body. Although Harvard physicians had explained to interns and residents who I was, many people distrusted me. I think that in the beginning they concealed a great deal from me. I would like to say that I overcame my problems by astute field methods and intelligent explanation of myself and the study. In fact, many of them resolved themselves because of circumstances over which I had no control.

When the study was originally planned, it was with the cooperation and approval of Harvard, whose physicians gave the permission for me to do my work and informed the hospital's administrators of the study. In the interim, however, the hospital administration had changed and when I arrived some administrators did not know about me or the purpose of my study. When some of these men did finally learn I was in the hospital, I had to present myself to them and obtain their permission to continue the work. Before that happened, interns and residents became aware that administration did not know who I was.

A number of incidents served to disassociate me from hospital administration. Shortly after the newspaper stories appeared, for example, interns had been requested to meet with one of the hospital's administrators. Not knowing the purpose of this meeting, they tried to find out by questioning a senior resident. During the discussion an intern complained about the work of aides on the wards. "How," he asked, "do you go about replacing those people?" The senior resident laughed and said, "You don't!" He went on to explain that when he was an assistant resident, he wanted an aide fired and was almost fired himself. The intern looked perturbed and asked, "You mean you were a house officer and almost got fired because of an aide?" The senior resident nodded, adding as an afterthought: "You have to watch who you take on." Another intern told the group a head nurse had told him that one of the aides had tenure, but she did not. We all laughed, but one of the interns said he thought I had more tenure than a senior resident. At that point, we were joined by a secretary, who told the resident that everyone had been notified of the meeting. An intern, looking at me, said, "I think he is the only one that knows what the meeting is about." Obviously, interns suspected me.

Later that day I joined the interns at the administrators office. The man I had walked over with said, to no one in particular, "Well, the least we can do is sit down and wait for the man, but I'm sure he hasn't anything important to say." While we waited, my campanion asked me a number of questions about hospital administration and administrators. Since I knew little about either, I shrugged my shoulders. A few minutes later the administrator entered and, after looking at my name tag, greeted me as "Dr. Miller." He identified every person in the room in the same way. We followed him into his office, which was air-conditioned.

An intern who had earlier complained about hot conferences asked why he did not "do this for the entire hospital." Looking around his office, our host informed us that there were plans to refurbish the entire hospital; he explained that his office had been decorated before he came. Turning to the intern who had asked the question, I asked him if it wasn't the air-conditioning he was referring to, not the paneling, furniture, and fresh paint. "Yes," he replied, "I was, but see how guilty he is?"

We listened as the administrator discussed a number of items on his agenda. What was said is less important than the fact that many of the man's comments were directed at me. For example, he mentioned the rumor that house officers were taking food from the trays on the wards. Possibly he assumed me to be the most likely culprit because of my size: I am well over six feet tall and outweighed any other person in the room by at least 50 pounds. Looking at me, he said he was certain none of us was involved, but cautioned us against eating on the wards. In fact, none of us had been doing so, but after that I never refused a cup of coffee or a piece of cake when a nurse or an intern offered it. It became clear as the meeting progressed that the administrator did not know who I was. That fact amused the interns and worked very much in my favor. A number of them leaned toward me during the meeting and asked if I was doing anything about the Blood Bank's need of blood; if I was worried about malpractice charges; and if I planned to bring any problems I had with patients to the attention of this administrator. After the meeting the interns moaned and gave vent to outspoken criticism of administrators in general and this one in particular. One said, "I've got nothing better to do than come over here and let this jerk shit on me." Another turned to me and said, "You should do a study of hospital administrators."

For a time my presence at the hospital continued as a source of amusement to interns since others besides administrators did not know who I was. Once or twice a nurse ran up to me, asking what she should do for a critical patient. All I could do was point to an intern or resident and suggest she get a doctor. At other times teaching physicians who thought they remembered me from the fourth year at Harvard Medical School asked me questions. When I was unable to answer, and before I had a chance to explain, they covered my embarrassment and questioned someone else. At least one physician apologized for so embarrassing me, saying he was sure that I knew the answer because I had done so well as a clinical clerk at another Harvard-affiliated hospital. I am certain that there are people who, if asked, would name me as the laziest and least intelligent young man ever to serve an internship at the Boston City Hospital.

Finally the interns joined in the fun at my expense. To this day I do not know which one pointed me out to visiting physicians as a "big man in medicine," thus forcing me into a lengthy explanation of who I was to someone anxious to talk to one of the "big names." That kind of incident occurred most frequently during and shortly after the hospital centennial, when many alumni returned to visit. At least one other intern delighted in telling the story of the administrator who roamed the wards at night looking for a "fat intern stealing food from patients." All of these incidents, of course, helped to establish me as an independent observer, certainly as nothing more threatening than a sociologist.

When administrators did become aware of my presence, they asked me to meet with them and discuss the study. Thus I came face to face with administrators who had seen me around the hospital and thought me to be an intern. Much to their credit, they took this in almost good humor and allowed me to continue my work.

Almost no one could suspect that I was a stooge for the administration after it became apparent that they had no more idea of my presence and purpose than many others did. Another problem, however, was the fear on the part of some residents that I was gathering information for another Flexner report or, at least, a report that would be critical of medical education at the hospital. A senior resident suggested that it might be wise for me to meet with a few of the assistant residents and explain my work. If I was to continue at the hospital, it was necessary that these men who have charge of the wards, also accept me. If they did not, there was much they could keep hidden or could instruct interns to conceal from me. Needless to say, I took the first opportunity to arrange a meeting with the assistant residents on the wards I was studying.

The following excerpt from my field notes describes how my meeting with assistant residents was arranged, illustrating their concerns about the study.

> Yanofsky and I were on our way back to the ward from lunch. He asked me how the study was going. Yanofsky and Bloom (assistant residents) had asked about the study repeatedly during the past week. I said that I heard Bloom was also interested in the study. He nodded. I suggested that we get together and talk, if they had the time. Yanofsky said he would very much like to do so but had hesitated to ask me for a meeting. We arranged a time

> to meet. When we entered the ward a nurse stopped me and asked: "By the way, how do you like studying interns?" Yanofsky was still with me. I said I was having fun and enjoyed my work. She asked: "Do you put in your notes that they drink coffee all the time?" I said that they didn't and she laughed, saying: "I know, I was just teasing you."
>
> (July 29, 1964)

My relationships with interns and nurses were relaxed by this time, and I was occasionally being put on about my encounters with administrators and physicians who thought me to be an intern. There was very little such joking with assistant residents. It was almost another week before I made note of any such humor between myself and an assistant resident.

> I was sitting in the laboratory, talking with the interns. Yanofsky entered and sat down at a desk. He picked up a newspaper and nodded to me. After reading for a moment or so, he turned to me and said: "How about that? They're going to transfer your study!" I think I jumped, because I have been thinking of going over to the other wards but did not want to do so before handling some of the problems that the recent newspaper articles had caused between me and the assistant residents. I asked what he meant and he laughed, saying: "I mean Vietnam, of course. We may all be drafted and that means you will have to go with us." I laughed, but it reminded me that Yanofsky, though always courteous, has given me the feeling that I am intruding on whatever he or others are doing. This was the first time he attempted to be funny, even by making a remark that may well be hostile.
>
> (August, 5, 1964)

That same day, I met with assistant residents to talk about the study.

At this meeting the assistants asked two questions: (1) What kinds of data are you collecting? and (2) Will you publish your study? I told them that the study would be published because many people were interested in the subject, and publications helped my career. Yanofsky did not hear what I had said and asked Bloom. Laughing, Bloom said: "He said it won't help his career if he doesn't publish the study." Yanofsky looked at me and said: "At least you're honest about it." My response to the question had been almost word for word what I had heard many Harvard physicians say about their own clinical subjects. Asked to elaborate further on my work, "without compromising the study," I responded: "We would like to know what interns learn, who they learn it from, and what they do with what they learn."

Yanofsky cautioned me that what they did learn was more than "book learning." He then gave examples of what I shall later refer to as "learning the ropes." Yanofsky then asked I was aware that many people resented the study. In his words:

> People don't like it. I know that I resent it

> when you come around. I am pretty busy and have a lot of work to do. I don't like someone hanging around. People don't like it. After a while it doesn't bother you, but it does for a while. Find something to do with yourself, that should help.

(August 5, 1964)

The meeting ended in this way:

> Yanofsky asked: "When do you think you'll publish the study?" I told him that I had at least two years of data collection, but that I would see he received a copy no matter where he was at the time. I said jokingly, "We might even ask you to write the preface." We laughed. I said, "Well, I don't want to keep you from whatever you have to do. If you have any other questions, I'll be happy to answer them." Yanofsky smiled and said, "Well, things aren't too bad."

(August 5, 1964)

While I had made every effort not to be, apparently I was in the way because there was nothing for me to do. When I returned to the wards, therefore, I looked for ways to help interns with their work. If, for example, a patient had to be weighed, I would go for the scale. There were many such things that I could get, carry, and push, thus saving the interns an extra trip or some time. Also, I could help out by positioning the patient during a procedure or a physical examination. These chores became a continuing part of my activity as an observer. This is not to say that I did very much but that I did whatever I was asked to do to help an intern with his work. Many times there was nothing for me to do. The field notes, however, contain numerous mentions of my talking with waiting patients, pushing scales, carrying charts, finding nurses, helping move or lift a patient and in other ways making myself useful. Also, interns have to make many trips off the wards. They have to run from place to place arranging for services and finding people who can help them with their work. When others were busy, I was always available to accompany them. As I came to be accepted and tried to make myself useful, most interns were happy to have me around. The following comments, for example, were made by an intern who earlier in the year had tried to lose me every time I attempted to observe him at work:

> I went to the house officers' dining room, where I met Rosengard and Butler. I put together a tray and joined them at a table. As I sat down, Rosengard asked, "Where are you?" I told him I was spending most of my time at the clinic but would come over and visit him, if he really missed me. Rosengard, shaking his head, "No, thanks. Stay where you are. I'm very happy on the ward." He turned to Butler and asked if I had ever watched him at work. Butler said: "No, not really. Why?" Rosengard: "You haven't been watched until you've been watched by him. It's weird! He not only watches you but, if you take off, he meets you at places. I'm glad he's watching other people now." Butler asked him if I was really that bad. He laughed and said, "No, almost but not really. At least he's good company..." I asked Rosengard if he was happy being back on wards. He replied, "It's

> good to be back, after the clinic." I shrugged and asked, "Is that all you have to say?" Rosengard, "What do you want? You didn't buy lunch!" He laughed and, walking away, turned to say, "I'm on Peabody 2. Come up and see me some time."
>
> (September 24, 1964)

In summary, at the outset people had their own explanations of my presence and of the study. What they told me or allowed me to see almost certainly depended on their opinions of me and my purpose there. Although events served in time to establish me as an independent observer, curiosity about me complicated my relationships with others. Of course, they may have only needed time to get used to me. But many events and circumstances did lend credence to the early notion that I was a spy. For that reason I decided to repeat my first few months' observations during the following year. To learn the hospital's routine and acquaint myself with its ecology, I had entered the field a month before the group I was to study arrived. I used observations made during that time to develop initial hypotheses about the problems of an internship. Whatever questions the events I have described raise about the validity of those observations are, in my opinion, answered by the fact that I repeated them later. By the end of my first summer at the hospital, interns and assistant residents had accepted me. My observations now afforded me an opportunity to document their experiences and to follow up those data by questioning them about what was happening.

My original plan was to follow the groups of interns on two medical services through an entire sequence of experiences on the wards and at the outpatient clinics. This plan, I believed, would permit observation of all situations during the year. I soon learned, however, that interns did not remain in fixed groups. They were assigned as individuals, and new groups were formed almost monthly. In other words, there was no one group of interns but many small groups whose activities differed at different times of the year. Staying on the wards would have permitted me to observe all interns, as each of them spent a certain amount of time there. But while this would have given me extensive coverage of interns, I could not have learned much about their experiences in other situations. Following only a few interns, on the other hand, would permit observation of all situations, but not of all interns. This would have prevented my noting individual differences that might account for the character of their relationships and the level and direction of their effort.

I finally decided to spend time with as many groups as possible, but not to follow any particular interns from the wards to the clinic. I would, for example, spend time on the female ward of the Second Medical Service and then later move on to the male ward or the Outpatient Clinic. Some of the interns I had previously observed might be reassigned, but though I might observe them again, the situation would be different. My plan, then, allowed me to cover all situations--that is, the wards, clinics, accident and admitting floors--and to observe a more or less random sample of interns. Situational observations afforded opportunities to document the experiences of most interns, even though I observed some more often than others. This, I thought, was more valuable than seeing the year only as a few interns saw it.

I moved from group to group, went to lectures and conferences and spent time on the admitting ward and at the clinic much as the interns did. I accompanied them on rounds with visiting physicians, sat in on their discussions, and watched individual interns with patients. Thus I participated in all their activities without necessarily seeing each one in all situations.

In the beginning, I put everything I saw in my observation notes, and recorded in detail all conversations I took part in or overheard. After I had described things to my satisfaction, I began to leave out what I already knew or had observed many times. For example, I described the physical facilities of the place only once and, after a time, recorded the routine of a physical examination only if it differed in some way from others I had seen. When I had data, I formulated an explanation of the way in which I thought some things happened. Then I gathered additional data to support or disprove those explanations. I thought, for example, that medical students who had been at the hospital before the interns came were affecting the level and direction of interns' efforts by using their knowledge to influence what inexperienced newcomers did and how they did it. When I had sufficient data to substantiate that explanation of the student-intern relationship, I no longer recorded all supporting incidents. I continued to record any negative cases.

My field notes consist of data that were important because of my particular interest at the time and other data unrelated to my interests but a part of what was happening. I was not, for example, interested in the work of x-ray technicians, but I did record all that I saw of their work. Later observations suggested a relationship between interns and x-ray technicians similar to that between students and interns earlier in the year. By searching my notes for what I had already recorded about the technicians, I was able to substantiate an explanation that had been formulated after my fieldwork at the hospital.

Although I was studying a university-affiliated internship, I was interested in internships in general. For that reason I arranged to study interns at a Boston community general hospital conducting an approved program of graduate medical education. My method there was also participant observation. This second set of observations allowed me to gather comparative data as well as to question other people about explanations I had evolved at the Boston City Hospital. I wanted to know, for example, if medical students were really as important to interns as I had come to believe. Since the community hospital had no medical students, I could discover how their absence made the internship different. What I found indicated that the absence of medical students made some difference in how quickly interns learned their jobs. Although nurses at the community hospital served the function of students at Boston City, nurses did not know the work of an intern so well as students did and were, therefore, less able to assist inexperienced interns.

In general, I used the community hospital as a place to determine what was common about the internships I was studying. My observations at that hospital also served to point out processes that may be unique to the university-affiliated hospital conducting research as well as training physicians and providing patient services. I shall describe later the research facilities at the Boston City Hospital, but it was the lack of such facilities at the community general hospital that first made me aware that the organization of a hospital for research purposes was in part the result of a phenomenon that could not be divorced from the experiences of interns. That phenomenon is the existence of the medical elite as I have described it. At the community hospital there was no evidence that an internship was anything more than a straightforward year of hospital training before a young man became a practicing physician or chose a specialty in which to continue his training. On the other hand, internships at the Boston City Hospital were apparently an integral part of the organization of the medical elite and had meanings in terms of its organization.

After observing and questioning interns at both hospitals, I formulated questions relevant to the students' decisions to intern at a university-affiliated rather than a general hospital. A preliminary analysis of earlier data led residents, residents, and nurses. During my fieldwork I arranged such interviews whenever I needed elaboration of information acquired by observation. Thus I was also able to obtain information from people I did not often see in the wards or at the clinics. I did not see the chief resident, for example, and had to arrange interviews to obtain whatever information I wanted from him. Another such informant was the visiting physician who came to the clinics to work with students; I had few occasions to talk with him. With people such as these I had to arrange interviews by appointment. Others, such as nurses, whom I saw day in and day out, I could interview casually on the spot, as I needed answers to my questions. Some people I did not expect to interview approached me and themselves arranged for me to talk with them. Many of these conversations--with elevator operators, charwomen, and other personnel--resulted in useful information about the hospital, its history, and the medical schools conducting training programs there. Near the end of the year I conducted formal interviews with almost all the interns. These served two purposes: (1) to determine the educational backgrounds of the interns I observed and to elicit information relative to their choice of an internship and their future plans: and (2) to question interns I had not often observed about their experiences and to check my observations against what they told me. Based on the results of data already collected and analyzed, these interviews were designed either to verify my own explanations of particular points or to check them against how respondents said things worked. In each interview I asked for examples, sometimes presenting my own definitions of situations and discussing with the interns how these differed from their own interpretations.[4] If there were discrepancies or refutations of my explanations, I made it a point to gather additional data during the remainder of the year.

As I gathered data, I attempted to organize it topically, according to my interests. After a few months, however, the data were pertinent to different topics. The records of my field notes and interviews consist of approximately 2,000 single-spaced typed pages. Although the material could be subdivided by topics or organized in terms of the groups observed, these methods do not lend themselves to an analysis of the entire year. Simply, notes and interviews are in chronological order. An indexing system allows me to locate any given topic, group, or situation as needed for a qualitative analysis of the data.

A part of the analysis was done during my stay at the hospital. That is, I evolved numerous tentative explanations of what was happening on the basis of incomplete field data. Most of the analysis, however, was done after I had completed my fieldwork. My effort in the field was devoted to discovering interns' problems and documenting their solutions. After leaving the hospital, I organized my explanations into a series of hypotheses. A hypothesis, for my purposes, was a best guess of the way in which something operated at the hospital.

My major analytical problem was to assess the evidence I had to support the hypotheses I evolved from the data I had collected. In assessing hypotheses with qualitative data, I tried to determine the probability that a hypothesis correctly stated the circumstances and conditions found at the Boston City Hospital. What I did was to gather all the evidence in support of a particular hypothesis and compare that to the evidence that could refute it or require me to change it to take into account any negative cases that appeared in my field notes.[5]

FOOTNOTES

1. Abraham Flexner conducted a study of medical education in the United States and Canada. His method was to go to the medical school and talk with physicians and their students. Abraham Flexner, *Medical Education in the United States and Canada*, Bulletin #4, Carnegie Foundation for the Advancement of Teaching, New York, 1910.

2. Story headed "Harvard, Brandeis Eye Intern." *Boston Sunday Herald*, July 5, 1964.

3. See *The BCH Progress Notes*, Special Centennial Issue, Summer, 1964.

4. The rationale for my interviewing techniques may be found in Arnold M. Rose, "A Research Note on Interviewing," *American Journal of Sociology*, LI (September, 1945), pp. 143-144; and Howard S. Becker, "Field Methods and Techniques, A Note on Interviewing Tactics," *Human Organization*, 12, 4 (Winter, 1954), pp. 31-32.

5. This method of analysis is discussed in William Foote Whyte, "Observational Field Work Methods," in Jahoda, Deutsch, and Cook (eds.), *Research Methods in Social Relations*, II (New York: Dryden Press, 1951), pp. 493-514; and *Boys in White*, *locus cit*., p. 22 and pp. 30-32.

CHAPTER 3.

THE HARVARD UNIT AT BOSTON CITY HOSPITAL

The Department of Medicine of the Harvard Medical School is an association of physician groups at four Boston hospitals: Massachusetts General Hospital, Peter Bent Brigham Hospital, Beth Israel Hospital, and the Boston City Hospital. I observed only the interns on the Second and Fourth Medical Services, which, with the Research divisions of the Thorndike Memorial Laboratory, make up the Harvard Medical Unit at the Boston City Hospital.

The model of modern medicine is the highly specialized practitioner working in cooperation with colleagues. He holds a variety of hospital posts and, when possible, usually associates himself with a medical school. Furthermore, there are alternative careers which remove physicians from traditional medical practice. They may become medical scientists, teachers of medicine, or both. No matter what medical career a modern physician chooses, he will conduct his business within the medical institutions of a community.[1]

The most familiar medical institution is the general hospital. Usually established exclusively for the delivery of medical care, it provides paramedical facilities for the specialized treatment of patients by physicians. At a general hospital, training and research programs are likely to be subservient to patient care. Internships and residencies are the means by which these hospitals recruit the graduates of approved American and Canadian medical schools to attend patients and provide medical care.[2]

Not all medical institutions are general hospitals. There are university hospitals or hospitals affiliated with a medical school. These have as their basic principle of organization the threefold objective of medical schools: (1) the teaching of medical students and training of physicians and surgeons; (2) the conducting of basic research and clinical experimentation; and (3) the delivery of medical care to a population of patients with a diversity of illnesses and varied and complicated medical problems. Like general hospitals, university hospitals recruit medical school graduates to attend patients and provide medical care while learning and gaining experience. Moreover, internships and residencies afford medical schools an opportunity to select and sponsor young men for careers in medicine.

Most medicine in Boston is somehow affiliated with one of the three medical schools--Boston University, Tufts University, and the Harvard Medical School. Each has teaching, research, and service agreements with hospitals and other medical settings throughout the city. Although institutions remain autonomous, hospitals affiliated with a medical school are closely linked by reciprocal agreements, working relationships, and the colleagueship of physicians at the various medical settings. The physicians on the staff of a given hospital are likely to hold faculty appointments at a particular medical school.

Excluding unaffiliated hospitals and those united by the religious orders, Boston medicine is conducted in three sets of medical settings, each affiliated with a medical school.[3] All hospitals, clinics and laboratories affiliated with a medical school comprise a subsystem of local medicine. The institutions of a particular subsystem subscribe to a single body of policies governing the practice of medicine and the delivery of medical care, and their staff physicians have compatible opinions about medicine and the medical profession. The teaching and practice of medicine are distributed among these subsystems of institutions and subgroups of physicians, each of which, to some degree, differs from the others in policy and opinion, so that each has a unique subculture of its own.

The Boston City Hospital

The Boston City Hospital, according to its brochure "one of the great general hospitals of the world," opened to the people of Boston on June 1, 1864. During that first year the hospital had a visiting staff of six surgeons and six physicians, and a house staff of five interns, who had been selected from the undergraduates of Harvard Medical School. "The first group of interns were not drawn from the graduating class of Harvard," newcomers to the hospital are told, "but from the undergraduates because the graduating class was going to war--the Civil War, that is."[4] Later in 1864, Harvard began teaching medical students at Boston City Hospital.

"Originally in 1864," wrote William B. Castle, "twenty-eight beds for medical patients were provided on each of three wards, E, F, and G, located in (one) of two pavilions...E and G were used for male, F for female patients, and the basement beneath served as a medical outpatient department.[5] Today the Hospital is a 1,400-bed facility for research, teaching and care of Boston's medically indigent. In 1864 it boasted a total medical staff of 17; today it has more than 400 physicians and surgeons and 300 interns, residents and research fellows.[6]

The Hospital is a complex of buildings connected by tunnels and corridors leading to myriad offices, laboratories, and wards. Although attempts have been made to modernize the buildings, gossip hints that the city is making every effort to maintain the hospital as a historic site in its original condition. In 1964, the year of the Boston City Hospital Centennial, an intern informed a less knowing visitor whom he met in an elevator that Sherman had started his March to the Sea at the time the Hospital's doors were opened. The elevator operator interjected, "What d'ya mean at the same time? He started his march at The City!" The Hospital does, in fact, look as if it had been allowed to deteriorate. The physical facilities are often make-do; the buildings are old and in need of repair. This is not to say that the facilities are not adequate. Rather, they are not modern.

Harvard, Boston University and Tufts operate clinical training and research units at Boston City. Each school staffs two medical services--a male and a female ward--and one surgical service, and one or more of the numerous specialty services, as well as the outpatient clinics. The Harvard Medical School maintains the Second and Fourth Medical Services, the Fifth Surgical Service, and the special services of psychiarty, neurology, and neurosurgery, as well as the Thorndike Memorial Laboratory, (Chart 1). In addition, each of the three medical schools supports programs of teaching and research of particular interest to its physicians. All such programs are more or less associated with one of the specialty outpatient clinics: cardiology, dermatology, diabetes, endocrinology, or gastroenterology. The Harvard program in diabetes and metabolism, for example, collaborates with the Hospital's Diabetes Clinic.

With the exception of the surgical services, each unit is responsible for a variety of medical activities. First, it must staff and supervise the medical care of the acutely ill on its male and female wards. The medical services treat approximately 3,000 patients admitted to these wards during the year. They also operate open clinics for outpatients and follow-up clinics for the continuing care of discharged patients. In rotation the three medical services supply interns and residents who examine and give emergency treatment to patients on the Accident Floor and in the Admitting Department. Finally, the physicians of each medical school provide consultation in their specialties to other physicians at the Hospital. For example, the Infectious Disease Research Division of the Harvard Medical School and the Fifth and Sixth Medical Services of the Boston University School of Medicine conduct regularly scheduled consultation rounds on infectious diseases. In turn, the Second and Fourth (Harvard) Medical Services have x-ray conferences with a professor of radiology from Boston University.

Chart 1. Medical, Surgical, and Specialty Services of Boston University School of Medicine, Harvard Medical School, and Tufts University School of Medicine at the Boston City Hospital.[a]

THE BOSTON UNIVERSITY SCHOOL OF MEDICINE

Fifth and Sixth Medical Services

Third Surgical Service

Specialty Services:

- Pediatric
- Orthopedic surgery, with Tufts University
- Urology, with Tufts University

THE HARVARD MEDICAL SCHOOL[b]

Second and Fourth Medical Services

Fifth Surgical Service

Specialty Services:

- Neurology
- Neurosurgery
- Psychiatry

THE TUFTS UNIVERSITY SCHOOL OF MEDICINE

First and Third Medical Services

First Surgical Service

Specialty Services:

- Dentistry, in conjunction with School of Dental Medicine
- Dermatology, with the Graduate School
- Ophthalmology
- Orthopedic Surgery, with Boston University
- Otorhinolaryngology
- Urology, with Boston University

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[a] Specialty services affiliated with or having representatives of all three medical schools on the Visiting Staff are not included--*e.g.*, pediatric surgery, thoracic surgery and pathology.

[b] The Fifth Surgical Service and specialty services were not included in the study.

During 1960 Boston City Hospital's 1,392 beds were occupied by 32,053 patients, treated by 700 physicians from three medical schools; another 274,339 patients visited the outpatient department, and 125,000 were treated as emergency cases at the Accident and Admitting Departments.

Many of the patients come from Boston's South End. Before the family of the fictional late George Apley (1866-1933) moved to fashionable Beacon Street, they lived for a few years in the South End. At the time, "nearly everyone was under the impression that this district would be one of the most solid residential sections of Boston instead of becoming, as it is today, a region of rooming houses and worse."[7] But by 1936, when Marquand's memoir of a Boston gentleman was published, the South End had already declined. Today it comprises rooming houses and apartment buildings with absentee-landlords, mixed in with industry, bars, cafes, and a Skid Row.

Many people with jobs live and own homes in the South End. Some of its middle-class residents cherish visions of "making over the South End into a Georgetown of sorts."[8] But many more are poor, and some live in public housing. Twenty-five percent of the South End's people are 60 years old or older; they live in cheap rooming houses or crowded apartments. The state has issued in the South End, 116 liquor licenses and the local War on Poverty includes a treatment and rehabilitation center for alcoholics operated by Boston University.[9] The neighborhood's old and poor, as well as its Skid Row population, receive most of their medical attention at "The City."

"The City," however, is only in part a general hospital. By the nature of its patient population, it is; (1) a medical facility for the acutely ill alcoholic; (2) a geriatric facility for the chronically ill; and (3) a social welfare agency. The alcoholic, according to an intern on the Second Medical Service, "comes to the Accident Floor by police ambulance, or is dragged in by friends, or just comes walking in acutely ill." Patients who are 60 years old or older also come in off the street or are brought from rooming houses by the police. Others come every Friday afternoon, sent by nursing homes in the belief that some medical problem will erupt over the weekend. These patients may stay in the hospital for weeks before returning to the original nursing home or getting located at another one. As one intern said:

> Well, let's put it this way: There are certain patients, those who are chronically ill, that stay with you for a very long time. If there was a chronic disease hospital associated with the City, where these people could go without having to wait two weeks to have papers processed, it would make life a lot more reasonable...The fact of the matter is that they are going to be in the hospital for

> three weeks anyway, until they get placed (in a nursing home.)[10]

These patients bring with them almost every kind of illness or disease. For the intern this situation is fortuitous, because it affords him exceptional opportunities for studying diseases and obtaining clinical experience. During my first day in the field, for example, I observed a young woman with typhoid.[11] I was told that an intern might see a case or two, "but not really many more than that, maybe not even that many. At other hospitals he might not see any."[12] Patients who provide the food for learning, then, become the "interesting" ones, and word of them is passed around the hospital. The great majority, however, have the more common chronic and acute illnesses.

The Harvard Medical Unit.

In 1915 the Hospital's trustees decided that the administrative heads of the Third and Fourth Medical Services would be appointed on the advice of Tufts and Harvard Universities. Thus the new Fourth Medical Service became Harvard affiliated, and its wards, T and U in the Burnham Building, were authorized for Harvard's teaching purposes. Today those wards are Peabody 1 and 2 of the Fourth (Harvard) Medical Service. In 1930 the Second Medical Service became part of the Harvard Medical Unit.

The Second and Fourth Medical Services occupy all of one building and part of another. The Burnham Building, erected in 1906, houses the Fourth; the Medical Building, opened in 1930, houses the Second on the fifth and sixth floors. Each medical service consists of a male and a female ward with 30 beds each. During a usual year approximately 1,500 patients are admitted to the wards. Their care is entrusted to interns, assisted by medical students. The former, in turn, are supervised by residents. The informal hierarchial rule runs this way: A medical service belongs to the senior resident; a ward, to the assistant resident; and the patient, to the intern. On the house staff of the Second and Fourth Medical Services are four senior residents, 16 assistant residents and 16 interns.

Not long after the Fourth Medical Service was opened Harvard physicians, encouraged by the Dean of the Harvard Medical School, began using the site as an "academic clinic." The Massachusetts General and Peter Bent Brigham hospitals had already been established as clinical and research settings. In 1919, supported by a gift in memory of William H. Thorndike, Dr. Francis Weld Peabody became the first director of the Thorndike Laboratory.[13] Under his administration research laboratories were erected, and in November, 1923, according to Castle, "the Thorndike Laboratory was formally dedicated and so became the first clinical research facility in a municipal hospital in this country."[14]

Today the Laboratory consists of a ward for the study of patients with particular problems, usually transferred from the wards of the medical services, and laboratories occupied by members of the several divisions of research being conducted at the hospital. There are a dozen or more senior investigators, both part and full-time, and a score of research fellows distributed among nine research divisions.

Although the hospital's patient population may not afford its interns a variety of clinical experiences, it does lend itself to the research divisions. The Division of Liver and Nutrition, for example, conducts studies of liver disease, particularly cirrhosis, and nutrition in artereosclerosis--conditions that a patient population consisting for the most part of the old and alcoholic amply provides. The many patients admitted with gastrointestinal and other bleeding offer opportunities for studies of the effects of abnormal bleeding, a research concern of the Division of Hemorrhagic Diseases. Other characteristics of the same patient population lend themselves to the various research interests of other divisions of the Thorndike Laboratory.

The physicians of the Harvard Medical Unit hold faculty appointments in the hospital's Department of Medicine. The work of interns on the Second and Fourth Medical Services consists almost entirely of examining and treating patients admitted to the hospital. Other members of the Unit, however, engage in specialized training or clinical and scientific investigation, and may never examine or treat a patient except for those purposes. Thus there is a wide diversity of positions and duties. Within the general medical culture of Boston, the physicians foster a subculture with which medical school graduates coming to the hospital (that is, interns) become imbued from the outset. Naturally, the interns' version of the medical subculture will differ from that of the physicians, because their problems and responsibilities are different.[15] Under certain conditions this may lead to conflict. For one thing, the interns may organize their efforts in ways that physicians do not approve. On the Harvard Medical Services, however, there is remarkably little conflict between interns and physicians. In fact, there is little conflict between interns and anyone else at all.

A characteristic of patient care on the Second and Fourth Medical Services is its immediacy: "If it's not done today, there will be that much more to do tomorrow." Away from the wards, however, the young interns might reject the reason "because here and now this has to be done" as the only justification for doing a thing. While it is true they must be prepared to meet the demands of attending patients, the demands are not entirely unexpected, and they learn to keep abreast of their task.

Sharing a Medical Setting

The arrangement that the three medical schools have with the City of Boston to occupy the Boston City Hospital is not unique. Other schools in other cities share medical settings. Sharing a setting, however, affects the practice of medicine within the hospital. Also, the organization of the hospital that has evolved from that arrangement perpetuates each medical school's subculture of medicine.

Although operating under public auspices, the three private medical schools staff and manage their own medical, surgical, and specialty services. Not only are all hospital departments affiliated with one or more of the schools, but the medical schools share the cost of teaching, research, and patient care. During 1964 and 1965 Harvard University, for example, budgeted approximately a million and a half dollars for the cost of maintaining and operating its Unit.[16] Hospital administrators are appointed by the City of Boston.

Each medical and surgical service, as well as most departments, however, has an administrative head who is selected from the physicians on the faculty of the particular school with which the service or department is affiliated. Thus the director of the Thorndike Laboratory and the Second and Fourth (Harvard) Medical Services is appointed by the trustees of the Boston City Hospital, but only on the recommendation of the Dean and Faculty of the Harvard Medical School.

The administrative head of a service or department is technically a member of the hospital's administrative staff, but his appointment and the policy that guides him are a result of decisions of physicians responsive to the expectations of colleagues at one of the three medical schools--that is, to their shared understanding of medicine and the medical profession, and of the proper behavior of a physician. Each medical school also selects its own interns, residents, and visiting physicians, who are, only on recommendation of the administrative head of a service or department, appointed by the Board of Trustees to the staff of the Boston City Hospital. Thus Harvard, Boston, and Tufts medical schools occupy the Hospital and assume much of the responsibility for running its affairs.

The most obvious consequence of these circumstances is a conflict between the medical schools and the administrators appointed by the city. "Much of the stress and tension occuring in hospitals," writes Croog, "can be traced to varying types of clashes between the (administrative and medical) systems of authority."[17] These clashes result in large part from differences of opinion regarding the problems and purposes of a hospital. One line of authority is the hospital administration, appointed by the Board of Trustees and responsible for the day-to-day maintenance and operation of the hospital. The other line, the medical staff, is divided among groups of physicians from three medical schools. Because the three schools jointly occupy the hospital, Boston City has more than the two commonly noted lines of authority.[18]

Naturally, additional lines of authority afford more occasions for a clash of interests between the administrative and medical systems. Needless to say, the more occasions for conflict, the more discord. Furthermore, hospital administrators resent the divided loyalties of administrative heads as a subversion of their authority by the medical schools. The shared medical setting heightens the friction between the hospital's administration and its multiple medical staffs.

The hospital comprises three groups of physicians, each with its own understanding of the appropriate concerns of medicine and the activities proper to physicians, and each recruiting or training new physician members. Physicians support divergent opinions on what constitutes the practice of medicine and what are the essentials of medical care.[19]

The hospital maintains facilities for the training of physicians, scientific investigation, and the treatment of patients, but the three medical schools do not place equal value on these activities. Although the schools attempt to perform each of the above tasks creditably, they have somewhat different purposes for being in the hospital. All physicians would agree that the proper concerns of the medical profession are the study and treatment of human diseases. But opinion regarding the relative importance of study and treatment varies greatly, and the opinions of physicians at the Boston City Hospital are as varied as those entertained by the medical profession in general.

Each group of physicians at the hospital cherishes a view of medicine not quite like that of the other two. Each group's understanding of medicine unites, in varying combination, the following elements: (1) academic medicine-- medicine as the scientific study of human diseases, their nature, causes, and management in the individual patient; (2) traditional medicine--medicine as a private practice with a clientele; and (3) contemporary medicine--medicine as the treatment of patients individually and the prevention of disease in a community. One group is only slightly less academic but more contemporary than the Harvard physicians, and the third inclines to a more traditional understanding of medicine. The three separate medical subcultures at the hospital are particular versions of the general medical subculture.

Boston City Hospital fosters a number of conditions necessary for the development of a subculture. For example, each group of physicians is a part of a larger group, and its members are congenial by reason of their educational backgrounds, institutional affiliations, and the colleague system. Physicians may be on the hospital staff, but they pride themselves on their faculty appointments at the different medical schools. Also, the physicians of any one group are, by implicit understanding, excluded from participating in the administrative affairs of either of the others. This agreement divides the medical staff and distributes medical responsibility among three groups rather than entrusting it to a single group. Medical matters, therefore, are not a general concern of a medical staff, but the particular concern of separate groups. Each group may choose its own alternatives and carry on more or less independently. Conditions at the hospital permit each medical school to assume responsibility for its own affairs, particularly teaching and research. They also permit each school to maintain and implement its own concept of medicine.

The Medical Elite

By the "Harvard medical culture," I mean the understanding of medicine of the physicians of the Harvard Medical Unit at the Boston City Hospital. Sharing an academic understanding of medicine, these physicians pay most attention to the activities most congenial so that understanding--teaching and research. Says Maxwell Finland, M.D.:

> All teaching and research is oriented about the concept that the best care of the patient comes from the understanding of his chemical and physiological processes and their disturbance in disease, and that the management of the patient depends on a sympathetic application of this knowledge.[20]

The remark of an assistant resident on the Harvard Medical Services reflects the Harvard understanding of medicine:

> I think this is, you know, the way medicine really is. Heart disease is most common. Cancer is second. Stroke is the third most common killer in the nation. That's the way it is, and that's about the order in which we see it here.
>
> This is one of the big things we learn here. We learn about the body basically, and we

> learn so much about patient management that we treat, take care of common problems and can manage almost any emergency. I think this is the proper foundation on which to build a (medical) practice or (go into) research.[21]

The Harvard physicians also agree that the proper attributes of a physician practicing in an "academic clinic" are clinical competence and scientific curiosity. The exemplary physician, to young men of the Harvard Medical Unit, is George R. Minot, M.D., 1934 Nobel Laureate in Medicine. He has been described as the "Inquisitive Physician whose penetrating inquiries into the minutiae of his patients' problems and close attention to details of the results of his ministrations earned him a Nobel award."[22] The rationale of the medical activity of academic physicians is that a physician learns through concentrated attention to the effects of his treatment, and the patient benefits from the physician's new knowledge by receiving "a more rational application of therapy."[23] Accordingly, students, interns, and residents are encouraged to deal with a patient's illness as a disease entity and to learn how available remedies effect its course or cure.

The Harvard conception of medicine is rooted in the bacteriologic period of medical history. In the late nineteenth century many disease-producing microorganisms were discovered, and research on their biology and physiology was established as a concern of medicine. At the same time disease began to be associated with bacteria, and advances were made in the clinical use of antibacterial substances. Discoveries and advances in bacteriology, pathology, and immunology in the early twentieth century were followed by new knowledge in nutrition and metabolism. Shepard and Roney have described this period as "the era of bacteriology and pathology."[24]

In 1923 the Thorndike Memorial Laboratory was established as a research facility in the tradition of the era. The influence of the period was possibly stronger here than in the laboratories at other hospitals because Thorndike was the first in the country with its own wards. During the early years the clinical and research concerns of men at the Thorndike Laboratory were influenced by its first director, Francis W. Peabody, who had been on the staff of Peter Bent Brigham Hospital and had had both research and clinical experience at Rockefeller Hospital. After Peabody's death in 1927 the tradition was continued by George R. Minot, a physician trained in medicine and physiology, who became world-famous for his work on the successful treatment of pernicious anemia.

As an affiliate of the Harvard Medical School, the Thorndike Laboratory, with the Second and Fourth Medical Services, shares in its prestige. But the Harvard Medical Unit has a reputation of its own--specifically for academic medicine. This reputation was established by physicians who successfully conducted basic studies of diseases and their management. In a recent assessment of advances in biochemistry, for example, only four were described as outstanding, of which three were the results of studies by physicians at the Thorndike Laboratory.[25] As pathbreakers in medicine, these men established the Harvard Medical Unit's academic reputation and at the same time built their own careers in academic medicine and their reputations for leadership.

The prestige of an elite, however, depends only in part on reputation. It must also have power. As C. Wright Mills analyzed the condition of the elites:

> Some reputation must be mixed with power in order to create prestige. An elite cannot acquire prestige without power; it cannot retain prestige without reputation. Its past power and success build a reputation on which it can coast for a while. But it is no longer possible for the power of an elite based on reputation alone to be maintained against reputation that is based on power.[26]

A reputation without power would have given the Harvard Medical Unit no prestige except that accrued from its affiliation with the Harvard Medical School. It would, of course, enjoy such esteem as society accords all physicians and medical institutions, but eventually its reputation within the medical world would lessen, and its physicians would no longer be members of the elite of American medicine. If the Harvard Medical Unit is, in fact, among the medical elite, at least two other conditions must prevail: (1) Its physicians must be in a position to influence other elite groups of physicians; and (2) It must be possible to move between the Harvard group and other groups of the elite.

The shared medical setting enjoyed by the Second and Fourth Medical Services fosters a fraternal spirit among the members of the Medical Unit. As interns become involved with their work, they have little contact with their counterparts elsewhere in the hospital. They do not so much lose contact with those other versions of medicine as they become aware that they are somehow different. The distinctiveness of the Harvard subculture becomes exaggerated. The far-from-perfect working conditions also promote a strong sense of identification with a distinguished society of good fellows, which persists long after they have left the Harvard Medical Unit.

For diverse reasons, established or promising physicians leave the Unit and continue their academic careers at other medical schools and affiliated institutions. Most of the physicians in the later stages of an academic career at Thorndike Laboratory are "maturing young investigators," who depend for support on research funds granted by the Public Health Service of the Department of Health, Education and Welfare. The limited number of tenure positions at the Harvard Medical School is not enough for all the young men who might establish themselves in academic medicine. Many, finding themselves ready for senior appointments at a moment when none are available at the Harvard Medical Unit, move to other Harvard affiliated groups of physicians or go to other medical schools. Leaving for better positions in the certainty that it was only circumstances that prevented their staying, these men are not bitter, and their consciousness of fraternity persists.

Obviously, there are many school-tie groups of physicians, but only a few others exert such nationwide influence on American medicine. The record is unique. From the Harvard Medical Unit have come 28 deans of medical schools and numerous chairmen of departments at the "name" medical schools--for example, California, Illinois, Western Reserve, and Wisconsin. Many executives and members of the Association of American Physicians, the American Society for Clinical

Investigation and other select societies of academic medicine are also alumni of the Harvard Medical Unit.[27] Other alumni are on the American specialty boards, whose purpose is the "improvement of general standards of graduate medical education and facilities for special training."[28] At one time, five of the 12 members of the American Board of Internal Medicine had been either house officers or research fellows at the Boston City Hospital. Two of the other seven members of that specialty board had trained at Harvard-affiliated Peter Bent Brigham Hospital.

A final piece of evidence that the Harvard Medical Unit constitutes a medical elite is that the physicians joining it come from "name" schools. Many, on leaving, go to the top-flight institutions. That is, there are career moves between the Harvard group and other "name" groups of physicians. The reference to "name" schools is made without implications as to quality. By 1960, fewer than 20 medical schools had produced more than 50 percent of those on the medical staffs of American hospitals.[29] Among them are Harvard, which graduated 8.5 percent of physicians on medischool faculties and 5.0 percent of those with full-time hospital positions, Columbia, Johns Hopkins, Yale, Pennsylvania, Minnesota, Cornell, and Western Reserve.

Career moves to and from the Harvard Medical Unit are presented in Tables 1 and 2. In calculating the figures for Table 1, I have excluded all physicians awarded their M.D.s by any of the three Boston schools. The policy of the Harvard Medical Unit is to select for admission one-half of those medical students entering as interns from the graduating class of the Harvard Medical School. If the Harvard graduates were included, 75 percent of the Harvard Medical Unit would come from one of the "name" schools of medicine.

Many Harvard Medical graduates wish to stay in Boston. As they know well, "The internship that a doctor serves is a distinctive badge [and] is one of the most enduring criteria in the evaluation of his status."[30] Physicians interning at Boston City Hospital may aspire to set up private practices in the Boston Metropolitan Area. They might also go from the Harvard Medical Unit to Harvard-affiliated or other university groups of physicians in Boston. The physicians leaving to go to positions at the local medical schools were excluded from Table 2, with the intention of reflecting mobility between and not within medical systems.

All career moves between the Harvard Medical Unit and "name" schools of medicine are prima facie evidence of participation in the medical elite. Of all physicians who come to the Harvard Medical Unit without a Harvard M.D., slightly more than 53 percent were from "name" schools.

Table 1. Academic origins of all interns, residents, and other physicians at the Harvard Medical School compared to Harvard Medical School faculty, by selected "name" schools of medicine.

	Harvard Medical Unit		Harvard Medical School 1963	
Medical School[a]	Number[b]	Cumulative Percent	Number[c]	Cumulative Percent
Columbia	35	9%	17	10%
Johns Hopkins	34	17	15	23
Cornell	18	22	6	27
California	17	26	3	30
Yale	16	30	7	35
Pennsylvania	16	34	7	40
Minnesota	14	38	2	42
Michigan	12	40	7	48
Washington U.	11	43	1	49
U. of Chicago	10	46	7	54
Western Reserve	9	48	1	55
Rochester	7	50	3	58
	199	50%	72	58%

Source: Maxwell Finland, M.D. Also, Table 1, New England Journal of Medicine, 271, 21 (November 19, 1964), p. 1097.

[a] "Name" schools with 5 or more faculty members from the Harvard Medical Unit at the Boston City Hospital.

[b] N = 399

[c] N = 123

Table 2. Moves to "name" schools of medicine by members of the Harvard Medical Unit with academic appointments.

Medical School[a]	Number	N = 300	Cumulative Percent
Illinois	14		5%
Western Reserve	14		9
Columbia	10		13
Minnesota	9		16
Cornell	8		18
California			
Los Angeles	7		20
San Francisco	7		23
Johns Hopkins	7		25
Wisconsin	7		27
Cincinnati	6		29
Pennsylvania	6		32
Yale	6		34
New York University	5		35
Rochester	5		37
Stanford	5		38
	116		38%

Source: Maxwell Finland, M.D. Also, Table 5, Harvard Medical Alumni Bulletin, 39, 1 (Fall, 1964).

[a] "Name" schools with 5 or more faculty members from the Harvard Medical Unit at the Boston City Hospital.

Moreover, the proportion of physicians from these schools who come to the Boston City Hospital is comparable to the proportion of the Harvard Medical School faculty from the same "name" medical schools. The proportion of members of the Harvard Medical Unit who received M.D. degrees from Western Reserve was greater than that of the Harvard Medical School faculty who received their degrees from the same school. Maxwell Finland explained this difference:

> In this country several schools have an unusually large number of professors who are alumni of the Harvard Medical Unit at the Boston City Hospital, either attracted there by former members of the Unit or selected by the latter for training at City Hospital. Thus, Dr. Joseph T. Wearn attracted a number of bright and promising young men from this unit after he left it to head the Department of Medicine at Western Reserve.[31]

Fourteen physicians from the Harvard Medical Unit have been appointed to the faculty of Western Reserve Medical School; in addition, the head of the department and director at the University Hospitals of Cleveland was, until recently, a physician who served his internship and assistant residency in Boston. He began his career in 1942 as an intern recruited for the Harvard Medical Unit by William B. Castle. After holding appointments at the University of Chicago and Western Reserve Medical School, he returned to Boston to become Dean of the Harvard Medical School in 1965. "What better chance," asked the Harvard Medical Alumni Bulletin, " to 'determine the character' of medical education, at the General, at Harvard, and throughout America, than through the Harvard Medical Deanship?"[32]

Not all career moves are to the Harvard Medical Unit. For an understanding of its place in American medicine, it is necessary to consider where physicians who leave continue their medical careers. Good clinical experience is available at the Boston City Hospital, and it would not be surprising to find physicians who, having obtained that experience and served an appropriate residency, go on to the private practice of a specialty. Many do just that. Others, however, go into academic medicine: 46 percent of all physicians from the Harvard Medical Unit hold or have held academic appointments in medical schools; at least 36 percent of men with academic appointments are at one of the "name" schools of American medicine (See Table 2). Approximately 50 percent of all physicians having appointments outside Boston hold them at "name" schools or medical schools with some special relationship to the Harvard Medical Unit. The other 50 percent are distributed among some 50 other medical schools in America.

FOOTNOTES

1. Oswald Hall, "The Stages of a Medical Career," American Journal of Sociology, LIII (March, 1948), 5, pp. 327-336.

2. Basil S. Georgopoulos and Floyd C. Mann, The Community General Hospital, (New York: The Macmillan Co., 1962) p. 5.

3. The "more important" hospitals are affiliated with one of the three Boston medical schools. Others, until now unaffiliated, seek or have negotiated affiliations; for example, the Cambridge City Hospital has recently become affiliated with the Harvard Medical School. Also, community hospitals in the Boston suburbs have made overtures to the medical schools.

4. Welcoming remarks to interns on the Second and Fourth (Harvard) Medical Services, June 26, 1964. The Alumni Day audience, May 29, had been told: "As the graduating class of the Harvard Medical School had largely entered the Union Army and Navy Services, the hospital staff chose five undergraduate students as house officers."

5. William B. Castle, M.D. was the first Francis Weld Peabody Faculty Professor and had been the George Richards Minot Professor of Medicine at the Harvard Medical School as well as Director of the Thorndike Memorial Laboratory and the Second and Fourth (Harvard) Medical Services at the Boston City Hospital. I rely on his history of the Harvard Medical Unit at the Hospital, "The Second and Fourth (Harvard) Medical Services and the Thorndike Memorial Laboratory," in A History of the Boston City Hospital: 1905-1964, John J. Byrne (ed.), (Boston: Sheldon Press, 1964), pp. 57-90.

6. When Dr. Castle became Associate Director of the Thorndike Memorial Laboratory in 1932, research fellows were known as residents. Subsequently, the title was changed to connote the difference in place and type of work; that is, research fellows are assigned to work for a year or more in clinical research at the Thorndike Laboratory; residents are assigned to the staff of the medical services for further clinical training and assume responsibility for the administration of the wards.

7. John P. Marquand, The Late George Apley, (Boston: Little Brown and Co., 1936), p. 25.

8. "The South End Today" Boston Magazine (October, 1965). Published by the Greater Boston Chamber of Commerce.

9. The Boston Redevelopment Authority provided statistics and other information about the South End Urban Renewal Area. In 1966 I was contemplating a study of the careers of welfare recipients and held many preliminary interviews

with people living in the South End. Boston City Hospital was a major topic of conversation.

10. Second Medical Service, 5/25/65.

11. June 1, 1964. That day, 219 cases of typhoid had been reported in Aberdeen, Scotland.

12. Assistant Resident, Medical 5, Second Medical Service, 6/1/64.

13. The Harvard Medical Unit has a number of folk heroes. Francis W. Peabody is one, and a lecture of his, "The Care of the Patient," is distributed to all those joining the Harvard Medical Services. Another is Nobel prize-winner George Richards Minot, the "Inquisitive Physician." A folk hero in the making is William B. Castle.

14. William B. Castle, *op. cit.*, p. 64.

15. Howard S. Becker, Blanche Geer, Everett C. Hughes, and Anselm L. Strauss, *Boys in White* (Chicago: University of Chicago Press, 1961), pp. 192-3.

16. Reported by William B. Castle to the Faculty of Medicine, Harvard University, December 18, 1964.

17. Sydney H. Croog, "Interpersonal Relations in Medical Settings," in Howard E. Freeman, *et. al.*, (eds.), *Handbook of Medical Sociology*, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963), p. 256.

18. A number of sociologists have delineated the differences between administrative and professional (medical) lines of authority in a hospital. For example, Harvey L. Smith, "Two Lines of Authority: The Hospital's Dilemma," *The Modern Hospital*, (March, 1955), pp. 59-64.

19. Physicians are not the only group in agreement with the purpose of hospitals but divided on the essentials of their work. For example, nurses do not agree on what should be the work of a nurse, though they agree that patient care if the purpose of a hospital. See *Twenty-Thousand Nurses Tell Their Story*, by Everett C. Hughes, Helen MacGill Hughes & Irwin Deutscher (Philadelphia: J. P. Lippincott Co., Chapter 6.

20. Maxwell Finland, M.D., is George Richards Minot, Professor of Medicine at the Harvard Medical School and director of the Thorndike Memorial Laboratory and Second and Fourth (Harvard) Medical Services. This statement appeared in his report presented to the Faculty of Medicine, Harvard University, December 18, 1964.

21. Assistant Resident, 12/15/64.

22. Statement made by Maxwell Finland in "The Fruits of the Thorndike Memorial," Harvard Medical Alumni Bulletin, 39, 1. (Fall, 1964).

23. Finland, Report to the Faculty of Medicine, Harvard University, December 18, 1964.

24. William P. Shepard and James G. Roney, Jr., "The Teaching of Preventive Medicine in the United States," Milbank Memorial Fund Quarterly, XLII, 4 (October, 1964), Part 2, pp. 25-27.

25. Goldman, op. cit.; also, Maxwell Finland, "The Training of the Physician," The New England Journal of Medicine, 271, 21 (November 19, 1964), p. 1097. The three advances in biochemical knowledge were "thyroid-binding protein, the functions of which were described and elucidated by Ingbar and Freinkel; intrinsic factor, a name synonymous with Castle factor; and transferrin which was shown by Jandl and Katz to provide a sort of automatic cycle of doorstep delivery service of iron for hemoglobin production by the immature erythrocyte."

26. C. Wright Mills, The Power Elite, (New York: Oxford University Press, 1957), p. 88.

27. Approximately 11% of the active membership in 1963 of the Association of American Physicians and the American Society for Clinical Investigation had been at the Harvard Medical Unit. Also, "among the 61 members of the (then) newly organized Association of University Cardiologists, nine (were) present or past members of the Harvard Medical Unit at the Boston City Hospital." Bulletin, 39, 1 (Fall, 1964).

28. "Policies of Approved Specialty Boards," Directory of Medical Specialists, (Chicago: Marquis--Who's Who, Inc., 1963) p. 19, which is also the source of information on the educational histories of physicians.

29. Oswald Hall, "The Stages of a Medical Career," op. cit., p. 330.

30. Oswald Hall, op. cit.

31. Maxwell Finland, "Training of the Physician," op. cit. p. 1099.

32. Robin A. Fisher, "Upon the Threshold of the New," Harvard Medical Alumni Bulletin, 39, 4 (Spring, 1965), p. 7. Dean Ebert may not be quite so impressed with his

position as Fisher apparently was, but it is one of the most influential and powerful in American medicine.

CHAPTER 4.

RECRUITMENT OF CANDIDATES FOR THE MEDICAL ELITE

To be licensed as physicians, all medical students must serve an internship. This mandatory year may be spent at a city, county, community, or university hospital, in either a specialized or a rotating program of training. The kind of hospital an intern selects will determine the patients he will see as well as the teaching he will receive from practicing physicians. At community hospitals, for example, interns see private rather than house patients. They are taught by physicians in general or specialized practice, rather than by physicians teaching or conducting research at a medical school or affiliated medical setting. A specialized internship, no matter where it is served, provides considerable experience with patients whose medical problems are of particular interest to physicians in one of the medical specialties. The more typical specialized internships are internal medicine, surgery, pediatrics, obstetrics and gynecology, and pathology, the basic science of medicine. Rotating internships provide a variety of experiences, in all or a combination of the medical specialties.

Each kind of hospital and type of internship has a meaning of its own in the medical profession. Many physicians think it is important for those who wish to specialize to begin their training early. Others think the practice of medicine is facilitated by comprehensive training and consider a rotating internship important for those who wish careers in private practice. No matter which internship he eventually selects, the student's decision at this point has implications for the kind of medical career he will have. In choosing one internship over another, students turn their backs on some opportunities and commit themselves to others.

All medical students do not want the same kind of careers. Many do not want to be specialists, scientists, or teachers; they want to be general practitioners of medicine. Students are not passive spectators; they play a part in deciding what careers they will ultimately have by making decisions that affect the course of their training. Some may commit themselves as early as college by choosing premedical studies.[1] All who enter medical school are committed to medicine, but they commit themselves further when they choose their internships.[2] Obviously, students do not all choose the same kinds of internships. From among those internships available they pick the ones that are most in accord with their career aspirations.

The internships that students serve result, in part, from their actively seeking one or another medical career. Yet there are well-planned efforts to steer them in particular directions. In order to survive, specialty groups, medical school faculties, group practices, every subgroup of physicians must have an influx of new members. This regeneration cannot be left to chance alone; all groups must evolve ways to recruit candidates. The Harvard Medical Unit is no exception; its survival depends on the recruitment of graduates who are not only willing to serve internships but are, in fact, potential candidates for careers as scientists and teachers of medicine. A year in which all its interns planned to become general practitioners would be calamitous, since they would enter practice immediately after the mandatory year of training, leaving the Unit with no qualified candidates for assistant residencies. In other words, the Harvard Medical Unit would not have the people it needs to occupy its positions and thereby maintain itself at the Boston City Hospital. Therefore, the Unit has developed recruitment procedures to obtain interns who are considering careers as specialists, teachers or scientists.

The graduates of almost any medical school could serve the Harvard internships at the Boston City Hospital. Today, a good medical education can be had at all medical schools, and it would seem likely that any student who had done well could manage an intern's job. "The bottom of a Harvard class may be better than the bottom of a class at some other school," explained a senior resident, "but the top of the class at most schools is just as good as the top of a Harvard class and would do just as good a job at the City." But would the graduates of any medical school be candidates for careers as specialists, teachers, and scientists? Needless to say, the answer is that they would not. Many graduates want nothing more than to be able to begin medical practice. How, then, does the Harvard Medical Unit assure itself a sufficient number of students who aspire to the elite careers of medicine?

The Ports of Entry.

As there are "name" medical schools, so are there "name" internships. Most of the former are familiar to the American public, but few, if any, of the internships are at all well known. Those that may be recognized are affiliated with "name" schools or at such "name" hospitals as the Massachusetts General in Boston or Bellevue in New York City. Although the layman may know the names of medical schools and hospitals operating programs for the training of physicians, he knows little and probably cares less about the specific internships and residencies that make up graduate medical education in America.

The Second and Fourth (Harvard) Medical Services at Boston City Hospital are noted for producing academic physicians. Medical school students who aspire to academic careers are therefore advised by faculty members and other physicians to serve their internships there:

> Several members of our faculty have trained [at the Harvard Medical Services]; others were acquainted with it through friendships with men who had trained there. I spoke to several faculty members about it and wrote the BCH for information. I was advised by several faculty members that BCH was a fine place to intern [and] I am told that after finishing my training at BCH I can go anywhere and do anything.[3]

Medical students who choose university internships like Harvard's seek careers as specialists, scientists, teachers, or **some** combination of academic activities and specialty practice. One wrote, "I want to teach and perhaps do research part-time, combining practice with teaching, and if I become interested in a worthwhile problem, devoting time to research." Another said, "I want to be on the faculty of a good medical school; some time teaching, quite a bit of research, a few private patients." By their choice of internship, they announce their candidacy for this kind of career. Almost all interns at the Harvard Medical Services have turned their backs on the general practice of medicine. "I would like a general practice," wrote only one of the 16 medical students accepted in 1965, "being well qualified in all major areas, that is, medicine, surgery, pediatrics and OB-GYN, [but] I'm constantly told this is impractical." The Harvard internships are not the kind one serves only to meet the requirements for a license to practice medicine. The fact is made obvious by the following comments of a senior resident:

> I asked the senior resident, "What are you looking for in an applicant to the Harvard Medical Services?" He answered, "Well, let me first point out that interviews here do not carry a great deal of weight, and people are accepted or rejected mostly in terms of where they stood in their medical school class and the kind of recommendations they get. But I suppose, in general, what we look for in the interview is some assurance that the fellow is reasonably mature and sensible. The people coming here obviously are all intelligent. We look for what their interests in the future might be. I think, by and large, people coming here are interested in academic careers, and somebody who is interested in general practice in Rudolph Junction, probably, this isn't the internship for him."
>
> "Let's say a fellow came to you," I said; "let's say I came to you standing high in my class at medical school, and I have three decent recommendations, my Dean says I'm going to be a great doctor but a practicing physician, and I definitely am not going into academic medicine. How would this weigh?" The senior resident, shaking his head, explained, "It would probably weigh against you. I've never been in on the final acceptance or rejection of interns [but] I would think that they would tend to be rejected if they were definitely going into practice, unless they were extraordinary people."[4]

The Harvard program of graduate medical training is more than just simply a way to meet licensing requirements. The

Harvard Medical Services are a "name"--a port of entry for the medical elite. By 1964, 873 medical school graduates had served as interns, residents, research fellows, and staff members of the Harvard Medical Unit at the Boston City Hospital. A brief consideration of their subsequent careers establishes the Unit as one of the places where routes to careers in academic medicine begin. As Maxwell Finland wrote:

> We have nearly arrived at the half-century mark of the firm establishment of the Harvard affiliation of the Fourth Medical Service and the 40th anniversary of the Thorndike Memorial Laboratory.
>
> ...I had occasion to review the attainments of the alumni of the /Boston City/ Hospital and could not help but be impressed by the extraordinarily large number of them, particularly those of the Harvard Medical Unit, who have become leaders in academic medicine.[5]

Table 3 presents the positions at medical schools attained by these "leaders in academic medicine." Simple inspection of that table indicates that a significant number (39 percent) of those who began their medical careers at the Harvard Medical Unit do, in fact, continue in academic medicine. Of 384 graduates, 43 (a few more than 11 percent) attained positions as professors; 61 (almost 16 percent) became associate professors; and 45 (almost 12 percent) were named assistant professors at schools of medicine. A significant number of those who began their careers at other places but continued them at

Harvard Medical Unit also hold positions in academic medicine medicine. Of 265, 66 (25 percent) were professors; 45 (17 percent) were associate professors; and 35 (13 percent) became assistant professors at schools of medicine.

Thus there can be no doubt that this particular program produces physicians for university hospitals and medical schools. In other words, it contributes many of the members of the medical elite.

Academic Origins

Sociologists are concerned with the origins of members of the groups they study. For my purposes, it is not the social but the academic origin that is important. Medical students applying for internships could some from any of more than a hundred medical schools. The faculties at those schools do not all agree on what medicine is, and place different values on the activities around which physicians could organize their careers. When selecting medical students who would be most qualified as interns, members of any particular segment would prefer those whose understanding of medicine is compatible with their own. Academic origins are relevant variables of recruitment, because the kinds of training candidates have had is differentially valued by the various segments of the profession. For the medical elite, internship candidates from schools known for training general practitioners are of less value than graduates of schools with reputations for teaching and research.

Does a viable elite group select only the graduates of "name" medical schools? If not, are there other routes that afford access to persons from the less prestigious schools? More specifically, from which medical schools are interns selected, and why are they chosen to begin their careers at the Harvard Medical Unit?[6]

If only a few "name" schools did, in fact, provide all the personnel for elite groups of physicians, then the medical elite would be a relatively uncomplicated social phenomenon--merely a stratum of the medical profession comprising "name" schools of equal reputation, with personnel whose knowledge and skills were superior to those at other schools of medicine. Any stratum of medicine would be no more than an association of medical schools having a common reputation and physicians who share the same or similar understandings of medicine. If, on the other hand, the "name" schools provide most, but not all, personnel for a group of the medical elite, then other factors must influence the selection of candidates for elite careers.

Fifty percent of all those serving internships on the

Second and Fourth Medical Services during the study were graduates of the Harvard Medical School. Another 25 percent were from "name" schools like Cornell, Yale, Johns Hopkins, and Minnesota. But the remaining 25 percent came from other medical schools, such as Utah, Florida, Illinois, and the recently established Seton Hall in Jersey City, New Jersey. Furthermore, of those who went on to become assistant residents, 15 percent were from other than "name" medical schools. Of those from American schools who traveled the entire route, that is, to the staff of the Thorndike Laboratory and a Harvard Medical School appointment, one in seven were not from "name" schools. Thus, though only a few do so, it is possible for a graduate of a less celebrated medical school to begin his career with an internship on the Harvard Medical Services and progress to an academic appointment at Harvard Medical School.

Not all career routes that begin at the Harvard Medical Unit lead to the Harvard Medical School. They lead to academic appointments within American medicine generally. Table 4 presents the academic attainment of those who have been interns or residents at the Boston City Hospital. Of those who have or had academic appointments at American medical schools, approximately one in five were at one of the three

Boston medical schools. More than 75 percent of those who had been interns or residents held positions at 73 other medical schools in the United States. In other words, an internship served at the Harvard Medical Unit can lead to an academic position at almost any medical school.

Table 3. Academic Origins of Interns and Assistant Residents on the Harvard Medical Services at the Boston City Hospital July 1, 1963 - June 30, 1966

Medical School Awarding M.D.	1963-1964		1964-1965		1965-1966		Total		
	In-terns	Assis-tant Resi-dents	In-terns	Assis-tant Resi-dents	In-terns	Assis-tant Resi-dents	In-terns	Assis-tant Resi-dents	Total
Harvard	9	3	8	7	7	6	24	16	40
Wisconsin	1			1	2		3	1	4
Calif.	1		1	2	1	1	3	3	6
Yale	1			1	1	1	2	2	4
Western Reserve	1	1	1	1		1	2	3	5
Georgetown			1		1	1	2	1	3
Stanford		2	1			1	1	3	4
Johns Hopkins		1	1	1		1	1	1	2
Cornell			1			1	1	1	2
Minnesota	1			1			1	1	2
Illinois		1			1		1	1	2
Washington U.			1			1	1	1	2
Bowman-Gray	1						1	0	1
Florida					1	1	1	1	2
Iowa	1						1	0	1
Utah					1		1	0	1
Virginia					1		1	0	1
Seton Hall			1			1	1	1	2
Columbia		1					0	1	1
Rochester				1			0	1	1
New York U.		1					0	1	1
Penn.		2					0	2	2
Tufts						1	0	1	1
Total	16	12	16	16	16	17	48	45	93

Table 4. Medical Schools at Which Harvard Medical Unit Alumni Hold Positions as Assistant Professors, Associate Professors and Professors

Medical School	Number of Academic Appointments	Percent of Academic Appointments
City of Boston:		
Harvard University	57	15%
Tufts University	18	4
Boston University	17	4
National, "Name":		
16 schools of medicine	122	32%
National, "Other":		
57 schools of medicine	173	45%
Total	387	100%

Source: Table 5, "The Fruits of the Thorndike Memorial," Harvard Medical Alumni Bulletin, 39, 1 (Fall 1964).

Since not all candidates for the elite come from "name" schools, some other variable must influence their selection. As I have little data, I cannot demonstrate that what is operating is the recruiting mechanism by which elite groups maintain themselves within the profession, though I strongly suggest that this is so. Physician groups use medical education to attract candidates. "The medical school curriculum today is crowded as the medical specialties compete for the student's time and attention, seeking to recruit or, at least to socialize the budding professional into the correct attitudes toward [specialty groups]."[7]

Each group of physicians must compete with other groups for candidates for its careers. All groups attempt to gain some control of the recruitment process and to guarantee that a sufficient number of candidates select their particular segment. There are not enough "name" medical school graduates for all internships that launch the elite careers. Also, physicians at medical schools share the aversion to inbreeding that is characteristic of almost all of academia. This further reduces the number of candidates by setting a limit on the number of graduates of a given medical school to serve its own internships. The Harvard Medical Unit, for example, limits the number of Harvard Medical School graduates to eight, half of the internships it offers at the Boston City Hospital. Graduates of other schools, then, must be recruited, and if candidates from "name" schools are not available, recruiters must turn to other schools. Let's see how the Harvard Medical Unit manages its recruitment.

My first hint of a recruiting policy came during my first few days at the Boston City Hospital. At a meeting of the Harvard Medical Society, when discussing the academic attainment of physicians who began or continued their careers at the Harvard Medical Unit, Maxwell Finland told his colleagues:

> All told, the professors have been spread among 76 of the medical schools and 3 colleges in this country and among 30 medical schools in foreign lands. The 'colonization' of certain of these schools by former members of the Harvard Medical Unit (and some also from other Harvard-affiliated Units) of the Boston City Hospital is an interesting subject in itself, but not for here.[8]

Obviously, medical school colonization has implications for recruitment. When I first heard the comment, my hypotheses was that the Harvard Medical Unit attempted to place its alumni at "name" medical schools so that they could recruit students for internships at the Boston City Hospital. The following excerpt from my notes demonstrates that this is not so:

> Brahm began by explaining to me how interns were selected. The approximate number of applicants, his best guess, is 260; approximately 70 from Harvard. He made it quite clear that these were his opinions. The policy, he stated, was to select a group of interns half of whom were from Harvard and half from other medical schools. Interns, he said, are selected on the basis of academic record and letters of recommendation. When I asked which played a greater part in the selection of interns--academic record or letters of recommendation--he said, "It's mostly their class standing." I presented a hypothetical case: a boy from Seton Hall in the top 10 percent of his class and a boy from the University of Minnesota in the top 10 percent of his class; both apply for internships at the Harvard Medical Unit. How would you choose between the two applicants? The hypothetical case was a bad one, because they had just selected a boy from Seton Hall Medical School. But it did get him started talking about "getting into Harvard." Brahm then explained that it was not only class standing but what school the applicant was from. Also, his letters of recommendation were important. If they came from people who were either graduates of Harvard, students of professors at Harvard, or known by professors at Harvard, they would help his application. This, he thought, played a greater part in the selection of interns than the physicians of the Harvard Medical Unit would admit.[9]

In this discussion I contrasted Seton Hall Medical School to the University of Minnesota because Seton Hall had only recently been established. My assumption was that no candidate for an elite career would have come from a medical school established less than a decade ago. The assumption was wrong. One other intern was from Georgetown

University. I was somewhat surprised that Catholic medical schools contributed two of the sixteen interns for 1964, but the academic origins of the others (see Table 3) were in no way surprising.

The following comments by Maxwell Finland describe the conditions that resulted in, among others, a career route from Seton Hall to the Harvard Medical Unit:

> In this country several schools have an unusually large number of professors who are alumni of the Harvard Medical Unit at the Boston City Hospital, either attracted there by former members of the Unit or selected by the latter for training at City Hospital. Thus, Dr. Joseph T. Wearn attracted a number of bright and promising young men from this unit after he left it to head the Department of Medicine at Western Reserve. Dr. Chester S. Keefer got most of his original staff from among members of this unit when he left to accept the chair of medicine at Boston University. Most of the professors from this unit who are at the University of Illinois were attracted there by Dr. Harry F. Dowling, who received some of his early training at the Thorndike. Dr. Harold Jeghers, an intimate friend and admirer, though not an alumnus, of the Harvard Medical Unit, sent some of his staff here for training and attracted others from there to join him when he became head of the Department of Medicine at Seton Hall.[10]

Within our schools of medicine are "colonies" of physicians who belong to the same medical fellowship. As we have noted, physicians leaving the Harvard Medical Unit continue to identify with one another as alumni of Harvard at the Boston City Hospital. Many of those who leave for positions at other medical schools have been told throughout their careers that they will be members of a select group. Graduates of "name" schools are told from the beginning of their careers that they are the select of the medical profession. For example, at the 1965 dinner of the Harvard Medical Alumni Association, new graduates heard: "I welcome you; not into the Great Society sponsored by a rival organization, but into the Most Exclusive Society in this country--The Harvard Medical Alumni Association."[11] A similar scene is repeated, with only slight variation, at most "name" schools of American medicine. For those physicians, the fellowship of Harvard Medical Unit alumni is nothing less than they expect: membership in an elite.

Since physicians who leave the Hospital realize that the circumstances of their going have nothing to do with them personally, they require no "cooling."[12] That is, those who leave do so without a feeling of failure that would end their relationship with the Harvard Medical Unit. As a physician who was considering a better position than he had or could anticipate if he stayed said; "All of us are good, but there just aren't enough slots for all the good men that want to stay." Thus those who go continue to consider themselves part of the physician group at the Boston City Hospital.

They are the "bird dogs" who recruit promising candidates for the Harvard Medical Unit. For example, 11 alumni of the Unit were on the faculty of Seton Hall.

Recruitment for this segment of the elite is accomplished by a network of "bird dog" colonies of physicians who owe allegiance to the Harvard Medical Unit. This procedure, for lack of any better label, I call the colonial policy of the medical elite. The medical schools with three or more faculty members who had interned at the Harvard Medical Services accounted for 20 percent of incoming interns. There were approximately 50 such alumni at half a dozen schools. The statistic becomes significant when compared to the six percent who come from almost 60 other schools, at which 185 other alumni held academic positions. The implication is that a function of the alumni contingents is to contribute personnel to the parent group. The number of those serving internships during the years in which the study was conducted is small, but the proportion of those graduating from "colony" schools makes tenable the hypothesis that recruiting for the medical elite is accomplished by a network of /‾career routes‾/ from "name" schools and other less celebrated schools that have been colonized by alumni of the Harvard Medical Unit.[13]

Since the model for elite recruitment evolved from data obtained during fieldwork in 1964, it was possible to obtain additional documentation only from those who were serving Harvard internships in 1965. In that year, eight interns were from other than "name" schools of medicine. The relevant circumstances of their choice of internship are summarized in Table 5. Six of the eight learned of the program from members of the faculty at their own medical schools. Five of these six reported having discussed the choice of an internship with at least three faculty members who had been at the Harvard Medical Unit. Although they learned of the internship and were advised to apply for it, only two of the six thought their decision to do so had been influenced by faculty members who were Harvard Medical Unit alumni. Medical school graduates beginning careers may not be aware of the role Harvard Medical Unit alumni have played in their coming to the Boston City Hospital. Graduates of the other than "name" schools who are further along the career routes talk freely about the circumstances of recruitment and sponsorship; also, they have learned a great deal about routes to careers within the Harvard Medical Unit:

> I asked: "You did have a couple of men at [your medical school] who had been at Boston City Hospital, no?" He nodded his head and replied, "I don't kid myself; [my medical school] is small and my references were important...the Dean and some

Table 5. Questions Regarding Decisions to Seek Internship Appointments at the Harvard Med. Unit and Responses of Medical Students Selected From Other Than "Name" Medical Schools to Begin Careers at the Boston City Hospital in 1965.

Questions	Number
How did you learn about the internship program at the Boston City Hospital?	
from a member of my medical school faculty	6
from a friend now at the Harvard Medical Services	2
Do you know if any of your medical school faculty had been at the Boston City Hospital?	
yes, many	2
yes, one of the largest contingents	1
yes, at least 3 had	5
Did any particular person influence your decision to intern at the Boston City Hospital?	
no	3
internship advisor	1
faculty members who had been there	2
friend who had been there	2
Were you advised to intern at the Boston City Hospital?	
yes, by faculty members who had been there	6
no	2

Source: Questionnaire completed by medical students prior to beginning at the Boston City Hospital. See Appendix II.

> faculty people had been at Boston City Hospital." He told me that he had heard about the internship from faculty who had been at the hospital for training. After finishing his assistant residency, he wants to stay on at the Thorndike. I asked: "How much do you think you improved your chances of working with [a "great" man at the Thorndike] by serving a Boston City Hospital internship? He replied: "I would say infinitely. I mean, just the fact that you've been here. I think this group takes care of its own...Senior residents are invariably people who have been assistant residents here [and] people who have done their training here from time immemorial have been the people that end up being chief resident. Those people who really express a desire usually get a job if they have not messed up or unless they haven't really done good jobs [as interns.]

All of those from lesser-known schools who chose the Harvard Medical Unit program in 1965 were graduates of medical schools where Harvard alumni had a contingent. Most learned about the program from, discussed it with, and were advised to choose it by Harvard Medical Unit alumni.

Homogeneity of Career Aspirations.

Sociological studies have usually assumed that the choice of an internship is a result of career aspiration. Different career goals will determine what is and what is not important about the internships. The choices of students at any one medical school, however, will be varied, because all students seldom have the same aspirations. There is little homogeniety of aspiration in medical school, as measured by students' choice of internships. A study of the University of Kansas Medical School, for example, demonstrated that the criteria for judging internships were intelligible to all students, but that the students disagreed on the relative importance of particular criteria. Sociologists conducting the Kansas study reported:

> In making [internship] choices students make use of certain collective understandings about the nature of an internship and the advantages one might gain from one. Further, these collective understandings define the particular advantages and disadvantages associated with each kind of internship. These understandings do not, however, specify which kind of internship one should desire or choose, for students recognize that individual students may have different views of what will be important for them to get out of their internship.[14]

Theoretically, there should be homogeneity of aspiration among students who choose to serve the same kinds of internships. I will document that students choosing Harvard internships at the Boston City Hospital do share similar hopes.

Students most often choose a number of internships; during the fourth year of medical school they apply for various ones, listing their order of preference. Applicants are, in turn, ranked by the groups to which they apply. Students' lists of internships are matched to physicians' lists of students. Each year this national matching program brings together students and the hospitals at which they will intern. Let us consider the other choices of interns at the Harvard Medical Unit. If they chose the same or similar programs, it could be concluded that there was a collective aspiration characteristic of those beginning on routes to elite medical careers.

Table 6 lists the other internship programs chosen by the 1965 Harvard Medical Unit interns. All 16 had applied to more than 29 programs in the United States. In six cases the choice was based on geographical proximity to the students' homes. If we exclude these, our group considered only 22 other internships. Excluding all other Harvard internships, we reduce the number of alternative choices to fewer than 20. The group's agreement concerning available programs is further illustrated by the fact that three out of four applied to the same 12 programs. Besides the Harvard internship programs at the Massachusetts General, Peter Bent Brigham, and Beth Israel Hospitals, 12 of the 16 had applied to at least one of the following: Western Reserve, Minnesota, Washington (Saint Louis), New York Hospital (Cornell), Yale, King County-Seattle, and the Bronx Municipal Hospital. Comparing the choices listed in Table 6 to the internships obtained by students at the Harvard Medical School, we see that the internships chosen are typical of those applied for by students at "name" schools

Table 6. Other Internship Choices of Interns Beginning on the Harvard Medical Services in 1965 Compared to the Distribution of the Harvard Medical School Classes of 1962 and 1964 Among Internship Programs in the United States.

Medical School or Hospital	Harvard Medical Unit 1965	Harvard Medical School[a]	
		Class of 1962	Class of 1964
Harvard	18	18	17
Massachusetts General Hospital	7	7	7
Peter Bent Brigham Hospital	5	6	6
Beth Israel Hospital	6	5	4
Western Reserve	5	2	3
Minnesota	4	4	3
Washington U. (Barnes Hospital)	4	1	1
Cornell (New York Hospital)	5	1	0
Yale	5	0	0
U. of Washington	0	0	2
Columbia	3	0	3
Duke	2	2	0
Johns Hopkins	2	1	0
California	2	1	4
Strong Memorial Hospital, Rochester,N.Y.	2	1	0
Pennsylvania	1	0	0
North Carolina	2	1	0
Vanderbilt	1	0	1
Utah	1	1	0
Bronx Municipal Hospital Center, NYC	4	0	2
New York University	2	1	1
King County, Seattle, Washington	4	1	1
Cleveland Metropolitan General Hospital	3	1	1
Buffalo General Hospital	2	1	6
Other	5	7	13

[a] Only those graduates who entered straight internships in medicine; rotating and surgical internships were excluded to make the internship choices comparable to the programs entered by graduates of Harvard Medical School.

of medicine. Choices of Harvard Medical Unit interns who had been students at "name" schools did not differ significantly from those of students who had graduated from other schools of medicine. No matter what their school of origin, the interns who came to the Harvard Medical Unit chose not only the same kind of program, a straight medical one, but selected internships at the same hospitals.

On the basis of data regarding internship choices in 1964, we may conclude that those who came to the Harvard Medical Unit had similar aspirations and agreed on the kinds of internships that were "good" and the places at which to serve them.

The Career Aspirations of Harvard Interns.

When contacted during the fourth year of medical school, most students who chose Harvard internships at the Boston City Hospital reported that they had sought alternatives to the traditional medical practice and had been considering careers as specialists, scientists, teachers, or a combination of all three. With only one exception, they had decided against general practice. Specialty practice was only slightly more attractive to them. The career aspirations of Harvard interns in 1964 and 1965 are presented in Table 7.

Data obtained by questionnaire before the interns began their work support the assumptions underlying the functional model for career routes of a profession. Most Medical Unit interns apparently chose this path because of elite aspirations; they wanted careers as scientists and teachers more than any of the other careers in medicine. Since most students say they want those careers and a majority do, in fact, eventually have them, there can be little argument that there is a relationship between aspirations and the course of travel toward medical careers. Logically, people with specific career aspirations will more often attempt to gain access to and advance along the routes to those careers than will people without those aspirations.

During the early weeks of the internship year, interns were asked which careers they wanted for themselves. When explaining their preferences, they were most often vague and noncommittal. The following example illustrates the generalities with which they described their elite aspirations:

> I think an ideal medical career would be one in which an individual was happy and a service to medicine as well as his community. I think this could be done by going into academic medicine in a specialty and devoting time to teaching, research, and patients. In this way, you will contribute in many ways to the advancement of medicine while at the same time leading a respectable, rewarding, and comfortable personal life.[15]

All students agreed that a Harvard internship or one like

Table 7. Career Aspirations of Those Serving Internships on the Harvard Medical Services in 1964 and 1965

Kind of Medical School Awarding M.D.	Career Plans				
	General Practice	Specialty Practice	Research and/or Teaching	Undecided	Total
"Name"	0	6	15	1	22
Other	1	1	6	2	10
Total	1	7	21	3	32

it would advance their careers. Exactly which career they were advancing toward was explained only by the term "academic medicine." For them, the future was some still-to-be-determined combination of teaching, research and, possibly, a limited practice located in a university-affiliated medical setting rather than the usual doctor's office. As we shall see, the aspirations of Harvard interns prescribed the specific action necessary to advance toward a worthwhile career but left nebulous the activities that would constitute their careers.

Additional data obtained from medical students further documented the general character of the aspirations that influenced their choice of internship. Most of them did not exclude any of the activities of medicine; they said they would like to do a little of everything--teaching, research, and caring for patients. Their aspirations did not change significantly during the course of the internship year. In the following excerpt from field notes, an intern at the end of his year described the future he wanted as a physician:

> I was with Brahm and we were discussing what he had learned during the year...I asked why he decided to serve his internship at the Boston City Hospital. He said: "Well, because it has an excellent faculty, a very excellent group of people and I wanted to have something to do with them, and the fact that I'm going into academic medicine and wanted an internship which...you know, looks good on paper." I said: "You said at lunch

> that you'll go anywhere you can get a good job. What is a good job?" Brahm said: "Not in order of importance: financial security," he laughed, "it would be in order, an institution where they give me what I want, and that is the opportunity to teach, hopefully, good students, not mediocre students. Also, the opportunity to do research, and a chance to practice a little bit of medicine." "But," I asked, "don't you want a practice?" He shook his head and said: "I don't want to have a private practice. I'd like to have private patients who I'd see because they were referred to me but no practice.[16]

Interns admit that they have chosen the Harvard Medical Unit because the demands of practice dissuade them from traditional medical careers. Students, interns, and residents all agree that a physician should serve a community, but they also know that being of service as a practitioner will require arranging their lives around the problems of maintaining a practice and the demands of patients. The following excerpt from my field notes illustrates the thinking of those students who look toward alternatives to careers as practitioners:

> Condon [assistant resident], who was sitting with Walters [visiting physician], waved to me and I moved over to join them. They were only a few chairs away from us at the same table. Walters was in practice and telling Condon about a patient he had. He is an alumnus of the Harvard Medical Unit and practices in Boston. When he finished telling his story he looked at his watch, nodded and got up to leave the dining hall. Condon turned to me and said, "I'd like to go into practice too, but I'm afraid the patients would kill me." I at first thought he meant his attitude toward patients would get him into trouble.

> I asked what he meant, and he said: "In my home town we've got about 15,000 people. In the county, I guess, about 45,000 people. In the town there are about 10 doctors there who care for these people. That's a big, demanding practice." I asked how practice was demanding. He said, "Well, Walters has to go out in the middle of the night. His patients think he's making all kind of money when he really isn't getting rich. Like this patient he was telling us about. There are four of them working on the case, special nurses around the clock, labs, equipment, and the hospital and all. It's a $9,000 hospital bill. That's the cost of the medical care. He said they agreed they're not taking a fee and don't expect one, but after it's all over, those people will say I had a $9,000 hospital bill. That's the cost of medical care. You have to put up with that and that attitude toward the doctor too." I asked what else you had to put up with in practice and he said, "You can't have a regular family life, and you die at a young age. That's what I meant by patients killing me. The demands they make age you quickly. Walters will be an old man by 50; he didn't get started till he was about 32; he really won't have a long life." I asked him what his future plans were. He said, "After I finish at NIH, I'll probably come back here to Thorndike. I'd like to have a few patients, but not really a practice. I think academic medicine will give me a chance to have a normal family life and not make the demands which would make me an old man before my time. With a few patients I could be called on to consult or advise and still do my work. I hope to be able to get a good appointment at some university when I finish my residency. I hope to do enough to get such an appointment."[17]

All interns at one time or another spoke of having future careers similar to that described as "ideal" by the medical school graduate beginning his internship, or "good" by the intern completing his year at the Boston City Hospital. They know it is not solely a medical practice they want, but a chance "to practice a little bit of medicine." They prefer nothing more than "the opportunity to teach" and "the opportunity to do research." This aspiration and the way it must be fulfilled is illustrated by the following conversation with a medical student who gained his clinical experience on the Harvard Medical Services and applied for an internship at the Boston City Hospital:

> I asked, "Would it be fair to say that you go to the Harvard Medical Unit if you want to go into academic medicine?" He replied, "No, if you want the opportunity to go into academic medicine you would go to a place like that and, if you find you don't want to go into academic medicine, you can always practice. In going to a place like the Harvard Medical Unit you more or less avoid making that decision, academic or practice? In other words, you can sit around and wait for openings. If you remain long enough at the City, who knows what'll happen. There is a sudden possibility, doors open, or something of that sort will happen. You don't know how things will go. If you're not in a position to know, you won't have the opportunity.[18]

In general, Harvard interns want careers other than those ordinarily available to medical school graduates. They want to be something besides practicing physicians. They do not know exactly what it is they will do in the future, but they do know that serving internships like these will give them many possibilities and put them in a position to take advantage of opportunity when it does present itself. One intern on the Second Medical Service explained: "There are probably other places that have as good teachers and the same type of patients that this place does, [but] because it was a possibility that I would want to go into academic medicine and since one ought not cut one's own throat, I chose the Boston City Hospital."[19]

Not knowing exactly which careers they want, but knowing they should not close any doors, medical students interested in something besides practice choose internships that afford maximum opportunities rather than commit them to specific career routes. It may well be that those who do not obtain internships at, let us say, Massachusetts General Hospital, feel that their careers have been damaged because they have fewer alternatives to becoming practicing physicians.

Medical students who said they wanted to become scientists and teachers did move toward those goals through their Harvard internships at Boston City Hospital, but they were not necessarily committed to these careers. The aspirations of the Harvard interns encompass elite careers, but not exclusively. Contrary to what one might expect, students' choices of internship results as much from their desire to remain uncommitted as from any particular elite aspirations.

With respect to specific activities of medicine, these interns' ambitions are broad, encompassing all but general practice. In fact, what they all aspire to is some alternative to traditional medicine. They share a desire to make no specific commitments that would preclude taking advantage of any and all opportunities that could lead to a worthwhile medical career. They do not know what their opportunities will be, but they do know that this particular internship or one like it will put them in position to choose among many attractive alternatives. This kind of thinking, rather than any specific elite aspiration, then, is what influences students to choose the Harvard Medical Unit.

Criteria for Judging Internships.

The career aspirations of medical students are translated into immediate perspectives on internships. To make the actual choice students employ criteria that are in accord with their aspirations and their understanding of the actions necessary to obtain the kinds of careers they want. As their aspirations were homogenous, so students who came to the Harvard Medical Unit in 1965 agreed on what was and what was not important to consider in choosing internships. Their criteria are presented in Table 8. Of the seven cited, the first criterion was geographic location. A few interns had thought it was not an important consideration. Six of the nine who thought location important had applied for at least one internship close to communities where they had family. Location matters especially to students who want to stay or locate in Boston:

> I am a Bostonian and will remain a Bostonian or, put it this way: If I get a Boston internship, I'll probably be buried here. I have an interest in remaining and remaining on their terms. Since I want to remain in the Harvard group, you don't want to go into exile, and this is sort of what happens if you don't have connections at the Harvard hospitals.[20]

The location of an internship determines with which urban system of medical institutions and what group of physicians the candidates become associated. Those who wish nothing more than to establish a general practice of medicine choose internships located in the communities where they hope to practice. Similarly, students who want other careers choose internships that will involve them in those particular urban spheres where their interests are best represented. Specialists, scientists, and teachers are generally trained in Chicago, New York City, or Boston; where they intern, however, will more or less determine where they take up their work. Location is also important because it leads to friendships and connections that will enhance a career. Interning in the community where he hopes to settle will facilitate a physician's

Table 8. Criteria for Judging Internships Chosen By Interns Beginning on the Harvard Medical Services in 1965.

Level of Criteria	Criterion	Important? Yes	No	Typical Comment[a]
Career	Location	9	7	"either New York or Boston" "Boston is tops in medicine"
	Prestige	15	0	"better chance of a good residency" "I plan a career in academic medicine"
	Professional Contacts	13	2	"it'll be a pleasure to meet some of the men I've heard about" "I want to stay in Boston, so a hospital here is good for my career"
Clinical Experience	Responsibility	16	0	"want a great deal of it" "get a great deal"
	Patients	12	3	"get only house cases, so you have the responsibility" "a heavy load of acutely ill patients"
	Teaching	16	0	"outstanding" "good advice and up-to-date ideas when you want them"
	Facilities and Working Conditions	8	7	"they are poor and argue against going to the Boston City Hospital" "you must ignore when applying to the Boston City Hospital"

[a] Comments offered by interns in explanation of the criteria they employed in judging the Boston City Hospital.

efforts to build a practice. Similarly, the location of a university internship will facilitate an academic career in a particular urban sphere of medicine.

A second criterion may explain why location is less important for those seeking academic careers than for those who plan to establish medical practices: All Harvard Medical Unit interns agreed that prestige was an important consideration in choosing an internship. The prestige of a particular training program is something that can be taken from city to city. Some internships may be so well known that they serve as credentials for entry into the academic circles of any other urban sphere of the medical profession. One intern, for example, explained that he chose a Harvard internship because of his desire to enter academic medicine in another city:

> I asked: "Since you knew you would be going back to be a resident, why did you come to BCH?" Roget said, "I had a friend in medical school, a very good friend who was here two years ago as an intern. Of course, I heard it was a good place but I took my cue from him. The other reason was that I wanted to come to Boston. I feel I went to an excellent medical school, but I wanted to get away for a year. I'm going back, but I wanted to come to Harvard." I asked him why, and he explained: "Well, because it is an excellent faculty; a very excellent group of people, and I wanted to have something to do with them. I'm going into academic medicine, and I wanted the internship which was the best or very good.

> I think of the word 'prestige' a great deal of prestige is being a part of this group. It just has a very, very good reputation, you know. It will look good on paper."[21]

When senior residents discussed the "best" places for training, they used criteria for teaching, patients, and responsibility. For them, the "best" internships were those where they could learn the most medicine. Students used these same criteria in choosing internships, but not in the same way. A senior resident thus interpreted the remark quoted above:

> I would make a bet that Roget is just and outstanding student who wanted to get a first-class internship in medicine, /‾and‾/ I think many people approach the internship like that, wanting to get the best internship they can to learn the most they can.[22]

Senior residents assume that students choose the Boston City Hospital because it is the "best" internship available. In fact, students do choose what they consider to be the "best" but, as Roget explained, the "best" is a matter of reputation or prestige. For students, "best" is not necessarily determined by the quality of teaching, type of patient, or the interns' range of responsibility. It is determined by the reputation of the program and the medical setting.

Data gathered from the 1964 and 1965 interns at BCH indicates that two sets of criteria guided their choice of a program and place at which to begin medical careers. Criteria for teaching, patients and responsibility were used when choosing "good" internships--those that offered clinical experience that would be a "good" base for whatever future career choices they might make. The following comments of an assistant resident refer to those criteria when explaining the benefits of serving a Harvard internship at the Boston City Hospital:

> We learn about the body basically, and we learn so much about patient management that we can treat, take care of common problems and can manage almost any emergency. I think this is the proper foundation on which to build a /‾medical‾/ practice or go into research.
>
> I think we learn here because you work with very good people who know what they are doing. You get the patients and problems, too. This isn't so at some other hospitals, where you don't have many acutely ill patients or, if you do, everybody's telling you what to do. Here, at the City, you have responsibility for the patient, but you're not alone and can get all the help you need, if you want help.[23]

Interns themselves consider these particular criteria when judging a "good" clinical experience:

> "Well," I asked, "why did you choose BCH?" He said: "The thing I heard that I liked most about it was that you spent most of your time on the wards taking care of your own ward patients and that you didn't have to spend time on private wards taking care of patients for other doctors, as you do at a lot of other hospitals." He told me he had been at the Peter Bent Brigham as a student. I asked him if he had to take care of patients for doctors there, and he said: "Yes. I think there and Mass. General the intern doesn't have too much responsibility. It's just no so satisfactory a way

> to learn medicine as taking care of your own patients. You are not really taking responsibility of the patients. Here there are plenty of good people to advise you, if you want advice. But you are the patient's doctor."[24]

Students reported using criteria for teaching, patients, and responsibility in much the same way as the assistant resident just quoted did. Apparently they agree on what constitutes a "good" internship or clinical experience. Their use of these criteria does not differ from that of other medical students. Everyone agrees that the internship should be a "good" clinical experience, characterized by a great deal of quality teaching, exposure to a variety of patients, and the opportunity to exercise medical responsibility.[25]

For students, however, "good" internships are not necessarily the "best." This latter category is related to, but not determined by, the quality of teaching, type of patients, or responsibility. Rather, it depends on the prestige of the program and its medical setting, as well as on the opportunity to make professional contacts. Students defined this last criterion as the opportunity to meet and work with established physicians, as well as to make friends who will be colleagues, moving in the same sphere of the medical world, at some time in the future. A sphere of medicine could be geographical or social, or could encompass a particular specialty or activity group. No matter which, good professional contacts would facilitate travel along the career route.

A final criterion students used to judge their choice of internship is hospital facilities and working conditions. Interns at the Boston City Hospital reported that they knew the facilities to be old and possibly inadequate. They also had considered the fact that there would be a heavy workload. "The working conditions," reported a medical student, "didn't influence my choice, but one can't ignore the dismal working conditions and facilities at the BCH." "But" writes another, "one must ignore facilities and working conditions when applying to BCH." In fact, all students did ignore what they agreed were undesirable working conditions. The following comment illustrates the rationale for choosing an internship in terms of the two sets of criteria just discussed:

> I believe that there are, perhaps, 50 straight medical internships throughout the country that would provide as good training and experience; as good as any of those I applied to. The difference is one of prestige; important for anyone contemplating a career in academic medicine.[26]

The Direction and Drift of Uncommitted Careers.

The choice of internships by students who did eventually come to Harvard resulted as much from an aversion to private practice as from any affinity for the careers of academic medicine. Students chose those internships because the choice moved them along career routes away from private practice. They did not know exactly what the alternatives were, but they did know that alternatives would become available as they gained "good" clinical experience by serving one of the "best" internships of the medical profession. A university-affiliated internship, they know, does not preclude practice. Simply, it affords access to other routes as well.

Some students purposefully choose internships that advance their candidacies for elite careers. Most, however, are simply attempting to increase the number of career futures that would be available to them. For them, the choice of an internship is influenced only slightly by elite aspirations. Attempting to avoid careers of medical practice, they choose internships that lend themselves to practice, research, teaching or a combination of these, and, by so choosing, place themselves on the routes to the medical elite.

Many students who begin on the routes to elite medical careers are only slightly aware of the kinds of careers open to them. If this is so, how can the interns at the Harvard Medical Unit be suitable candidates for the careers of academic medicine? Obviously, students whose aspirations do not encompass elite careers and who would be satisfied with general practice would not make suitable candidates. On the other hand, students attempting to advance their candidacies for elite careers and those who hope to avoid practice would use the same criteria when judging internships. Since both would be moving toward academic careers, they would make suitable, or at least potential, candidates for the careers of the medical elite.

Students moving toward academic careers or away from practice are placed in positions from which they may drift into careers as scientists and teachers at schools of medicine. By choosing "name" internships, they become members of a pool of potential candidates who may be influenced to continue traveling toward the careers of the medical elite. An intern on the Fourth (Harvard) Medical Service makes the point; that efforts to find alternatives to practice often make students drift toward academic medicine:

> Alwin told me that the Boston City Hospital wasn't his first choice, but that he was happy here and now jokes about his first choice, the Mass. General Hospital. He said, "We kind of kid a lot about the General. Most of us feel that we are happy here. I had the General as my first choice. Others had the City as their first choice, probably could have gone either place. Comes down to six of one and a half dozen of the other." I asked why he chose the General first and he replied: "The General is known all over the country, and their people go all over. Here, Thorndike has the reputation of turning out,

you know, educators, and so on, but I think that may be a little...well, it's hard to say. It was certainly true in the past. You never quite know. Some people think the Thorndike is dropping behind. I think the Medical Services are very good, but I honestly think that the fame of the City is due entirely to the Thorndike. But I think the Medical Services are good and they get good people to come here. All the people who become assistant professors come from the Thorndike." I asked, "What about people from the Medical Services?" Alwin nodded his head and said; "They do. A common pattern seems to be, since they are so strong in most clinical divisions of medicine, when you finish on the Medical Services you go on to the Thorndike. Then, from the Thorndike you stay or go elsewhere." "What are your plans?" I asked Alwin. He said: "Well, I'll get a fellowship in ___________ with _________." I asked him if he planned to do this before he interned at the Boston City Hospital. "No. I was forced to make a decision because I didn't want to go down to NIH. I didn't care for the job that was available, so I stayed with the Berry Plan. That means I have to have a fellowship going into the assistant residency. The people going into the Army or Public Health Service don't have to worry about it for a couple of years. I had to do some thinking and narrowed it down to a few specialties and then, suddenly, I decided it would be ______________." I laughed and said, "You just woke up one morning and decided it would be __________." He looked serious and said, "Not exactly. It did sort of creep up on me. Yuh, it did. If I hadn't been in Part 2 of the Berry Plan and knew I would have to go into the Army, I would have snapped at NIH. I might have gotten swept into some field that I started in down there." I asked, "How would you get swept into a field of medicine?" He replied, "If I did two years of work in a field, I probably would have discovered something interesting about it. There is nothing about the Cancer Institute that I particularly liked, but if I were to work there for two years maybe I would have become interested in it; a lot of people do. It does represent a substantial investment of time."[27]

At first I assumed that this intern planned an academic career and was illustrating the contingencies of travel along a route toward it. Later in our conversation, however, he indicated that he was drifting toward but was not yet entirely committed to a career of teaching and/or research:

> I asked Alwin where else he would have liked to serve an internship. He told me he had applied to Yale, Johns Hopkins, and a number of other well-known programs. "They are all famous," I said. He replied, "I think what people try to do when they decide that they are going into academic medicine is just get the best currency and training they can." "Currency?" I asked. Alwin nodded. "Yuh, in terms of the best people. I feel that if you get the best training you are mobile, and you can go anywhere you want." I asked, "Do you think you are able to trade in this currency you now have for a good fellowship and good academic employment?" Again he nodded, "Yuh, I think that's probably true." "Is that what you plan to do, go into academic medicine?" "Well, I'm not sure yet. I'm not a big lab man, and I don't want that to be a major part of my life. I really would like to teach and would like to visit on the wards. Things like that, but not to spend most of my time in the lab. I like clinical medicine."[28]

Many say they know what careers they want ultimately. They even give their aspirations a name--saying they plan a career in neurology or, more specifically, announcing the name of a man with whom they wish to work.

> Kaline stopped to talk for a minute: "I'm going to go upstairs. It's almost time for the conference, and I don't want to be late." Alwin asked, "Why not?" Kaline: "Dr. Freinkel is presenting. It's diabetes consultation rounds, and that is what I want to go into, diabetes. I hope to

> someday work with Freinkel. That's why I don't want to be late." Alwin nodded.[29]

Aspirations, however, are frequently more varied and less specific than this man's. Not everyone knows, even by the time he is a senior resident, what he wants as a medical career. The following, more typical comment illustrates the variety of aspiration and the varying degree of commitment found in interns and residents at the Boston City Hospital:

> We went up to Medical 5, where the senior resident [Lawrence] was waiting with Seeler, the Chief of the Second Medical Service. Lawrence was sitting at the head of the table, with Seeler at his right. Williams, the assistant resident, was also there, doing lab work with Kaline, one of the new interns. We sat down. I asked Lawrence what he hoped to accomplish by holding the meeting. He answered that he thought it best to have things clear from the beginning, things about running the ward. I asked Lawrence what he planned to do after his residency at the Boston City Hospital. He replied, "I'm from Ohio, and I think I would like to practice medicine in a small town." I asked the same question of Schwartz who sat between Lawrence and me. He replied, "I plan to go into academic medicine. I always have. I guess that's why I'm here." He chuckled. MacDougal, on my left, shook his head. When I asked him what was the matter, he said, "Well, everyone seems to be so sure of what they want to do. I know I'm interested in this new idea of electronic data processing, but that's all I know." Kaline was not sitting away from the table listening and, in an attempt to include him, Lawrence asked what his plans were. He said, "I plan on going into opthamology." Lawrence nodded and said that was getting to be the thing. Williams asked, "Isn't anybody interested in what I'm going to do?" I laughed and said I was

> interested. He said: "You know what I'm gonna do. I'm gonna go into academic medicine." I laughed and said: "That's not very original." Everyone laughed.[30]

A lack of commitment to any particular goal facilitates career drift--travel without an irrevocable investment in its outcome, without a commitment to a particular route that precludes travel along other routes of the medical profession. Consider, for example, the medical school graduate who accepts an internship in pathology. He may be advancing his candidacy for an academic career further than the students who choose to serve internships in medicine, but he is also making an early commitment that could rule out other medical careers. The same could be said of medical students who choose to serve no internship but do graduate work. Both of these students exhibit maximum commitment to particular careers. The drifter on the other hand, is the least commited of candidates. He is looking for an internship that closes the door on no career and maximizes the number open to him. He tries to stay uncommitted for as long as possible.

Career Drift: A Sociological Model.

Some elite careers could grow out of a series of defaulting decisions and not elite aspirations or prudent choice and action. In this chapter I have attempted to describe the first default that initiates the movement toward the elite medical careers. Possibly, there are other defaults. Further progress along these career routes may be similar, and other critical choices may be made accidentally.

The uncommitted candidate for a professional career has received little attention, but the drifter may be more characteristic of professional trainees than is usually assumed. A sociological model that makes no allowance for the ways in which people drift into careers explains the course of travel of only some candidates for the professions. This present study suggests a model for professional careers that would include uncommitted candidates and defaulting decisions. Such a model may prove useful in explaining the decision-making processes that affect travel along the routes of other professions. Sociologically, the beginnings of those careers were the result of efforts by recruiters to assure themselves of suitable candidates for the careers they were advocating and of decisions by students that intentionally placed them on routes to careers of scientists and teachers but accidentally made other candidates for the careers in the medical elite.[31]

FOOTNOTES

1. Wagner Thielens, Jr., "Some Comparisons of Entrants to Medical and Law School," Robert K. Merton, et al, (eds.), The Student Physician, (Cambridge: Harvard University Press for the Commonwealth Fund, 1957), pp. 131-152.

2. Patricia L. Kendall and Hanan C. Selvin, "Tendencies Toward Specialization in Medical Training," in The Student Physician, pp. 153-174.

3. All incoming interns at the Harvard Medical Services in 1965-1966 were required to complete a questionnaire before they arrived. See Appendix II. The comments attributed to medical students in this section were, unless otherwise indicated, from that questionnaire or accompanying correspondence.

4. Senior Resident, November 20, 1964.

5. Maxwell Finland, "The Fruits of the Thorndike Memorial," Harvard Medical Alumni Bulletin, 39, 1 (Fall 1964).

6. This question is a paraphrase of one asked about social origins as part of a study of American chemists. Anselm L. Strauss and Lee Rainwater, The Professional Scientist (Chicago: Aldine Publishing Co., 1962), p. 53.

7. Rue Bucher and Anselm Strauss, "Professions in Process," American Journal of Sociology, LXVI (January 1961), p. 331.

8. The comment was first made at a meeting of the Harvard Medical Society on April 7, 1964; later it was repeated in an article by Maxwell Finland in the Harvard Medical Alumni Bulletin, 39, 1 (Fall 1964). I first heard the comment discussed in the Medical Services on April 14, 1964.

9. Senior Resident, April 14, 1964.

10. Maxwell Finland, "The Training of the Physician," New England Journal of Medicine, 271, 21 (November 19, 1964), p. 1099.

11. Langdon Parsons, Harvard '27, at the Alumni Council Dinner, March 8, 1965.

12. Erving Goffman, "On Cooling the Mark Out: Some Aspects of Adaptation to Failure," Psychiatry, 15 (November, 1952), pp. 451-463.

13. A colony is either a school identified as such by physicians of the Harvard Medical Unit or one having three or more alumni reported by those beginning careers in 1965 to have influenced their decisions to choose Boston City Hospital.

14. Howard S. Becker, et al., Boys in White, (Chicago: University of Chicago Press, 1961), p. 385.

15. Intern, July 1, 1965.

16. May 24, 1965.

17. House Officers'Dining Hall, Nov. 17, 1964.

18. Fourth Year Medical Student, Jan. 20, 1965.

19. Intern, Second Medical Service, June 11, 1965.

20. Fourth Year Medical Student, January 20, 1965.

21. Intern, May 24, 1965.

22. Senior Resident, November 20, 1964.

23. Assistant Resident, December 15, 1964.

24. Intern, June 18, 1965.

25. For a discussion of criteria used by other students, see Boys in White, pp. 386-393.

26. Medical Student, May 27, 1965.

27. Intern, June 2, 1965.

28. Intern, June 2, 1965.

29. Interns, July 3, 1965.

30. Medical 5, Lab, June 29, 1965.

31. For example, Delbert Miller and W. H. Form, Industrial Sociology, (New York: Harper and Brothers, 1957), I am aware of the criticism of a position emphasizing occupational choices as accidents by such people as Ginzberg and others. Occupational Choice, (New York: Columbia University Press, 1951). There is only slightly more evidence, in my opinion, for considering occupational choice rational than there is for a position emphasizing the choice of direction but postulating a principle of double-effect such as I have described.

CHAPTER 5.

THE WORK OF AN INTERNSHIP.

After he had obtained an internship that provides satisfactory credentials and requires no irrevocable commitment, the intern's future aspirations become less important than the present task - successfully completing the work of an internship.

Comparison between the Harvard Medical Services and a community general hospital indicates that serving one of the "best" internships is not much different from serving a "good" one in a medical setting with lesser reputation. An intern gets his training primarily by working with patients, and though he attends some lectures and conferences, this is how he spends most of his time. Technically, interns are employees of the hospital, and they must carry out duties delegated and regulated by hospital authorities. In this respect the work of internships in both types of hospitals is very much the same, since it is dictated by the purposes of hospitals.

The intern's work consists almost entirely of attending patients in the emergency facilities, at clinics and on the wards. He must arrange his time so that the duties are manageable.

Work is not always the same for all interns. Some may begin by immediately admitting and attending patients on the wards. Others start out in the clinics or on the accident floor. A few have no patients of their own at first, but supplement the efforts of interns on the wards by assisting them in the evening and caring for their patients at night. At any time during the year, 10 of the 18 interns were distributed among the wards, while the remaining eight were assigned other duties.

The Work on the Wards.

There is a maxim that concisely defines the duties of an intern and his relationship to other house officers: "The patient belongs to the intern; the ward belongs to the assistant resident; a medical service belongs to the senior resident; and both services belong to the chief resident." The intern has been told since his student days that responsibility for the patient is the hallmark of the physician. The opportunity to exercise that responsibility is attractive for two reasons: (1) Its delegation to him is a benchmark of his progress in his medical career: (2) It enables him to deal directly with patients' problems and to gain valued clinical experience.

Clinical experience is the result of learning by doing; it consists of knowledge about disease and exposure to actual medical problems--the base of any medical career. Interns look forward eagerly to the seven months they will spend on the male and female wards. As a member of a group consisting of another intern or two, the assistant resident, medical students, and nurses, the intern will divide his time almost equally between the two wards. Other physicians are assigned as visiting staff on a rotating basis. These visiting physicians act primarily as teachers and take little part in caring for patients.

An intern's day begins between seven and eight in the morning. He arrives early to meet with the assistant resident, take the report of the night float, who may have admitted new patients, or attend to laboratory work. All these things are done before he makes his rounds, which he does from about eight until ten every day but Sunday, usually accompanied by the assistant resident and medical students. This team sees each patient and discusses his medical problems as well as the plan for his care. The intern presents the patients assigned to him and explains what he plans to do for them and why. These activities are not work rounds in the sense that work is actually done, though on occasion a procedure may be performed or something that has been decided at the moment may be done there and then. If, for example, it is decided that a patient would benefit from sitting up, a chair may be brought and the patient assisted out of bed. This is not, however, the purpose of work rounds. Most of the time is spent presenting new patients or discussing the problems and treatment of old patients.

When the intern and the assistant resident both know the patients and agree on treatment plans, work rounds progress quickly. It is at this time, however, that decisions are made. When patients are presented, other staff, particularly the assistant resident, will comment on the diagnosis and plans made by the intern. At this time the intern informs other interns, students, and the assistant resident of the results of physical examination and the group either agrees with the diagnosis and treatment plan or offers alternatives. The following are typical examples of what happens during work rounds:

> The house staff was having difficulty in agreeing on the diagnosis and deciding on a plan of treatment. Marrio, the assistant resident, asked: "What about steroids?" Lowenthal, the intern, shakes his head and says: "I don't think we have a clean diagnosis. It might be cirrhosis. I don't think steroids are indicated." Marrio agrees that is a good point. Lowenthal suggests doing a biopsy. A medical student and the senior resident agree with Lowenthal turns to Marrio and asks: "Do

> you think I'm wrong? If you do, I'll send him home today." Marrio shakes his head and says: "No, I think you can ask for a biopsy." Lowenthal nods and makes a note in the patient chart.[1]

At other times, the diagnosis is clear but there is some question about the treatment:

> The patient had myocardial infarct. An assistant resident said: "We keep them in bed for three weeks. Up in a chair the early part of the fourth week. Discharge is about the fifth week." Smith, an intern, looked surprised and said: "No kidding. Really?" The assistant resident told him that was the treatment for a myocardial infarction. Smith asked: "What do you think of that?" "Obviously," replied the assistant resident, "if we are doing it here on the ward, I like it. What do you think?" Smith: "It's so different from what I'm used to. We usually [as a medical student at another hospital] had them up in 36 hours. Do you have any trouble with phlebitis?" The assistant resident nodded and said: "We have had some, but you just have to watch for it. We could do it your way [but] we don't have the equipment. If we did, your way would be easier. Here, this way is best." The intern makes a note on some cards he is carrying. We move on to the next patient.[2]

The purpose of the work rounds is usually explained by interns thus:

> I asked what was the good of work rounds. "Well, for one thing," answered the intern, "it's good for the patient, because you are discussing that patient's care. You want to find out what's wrong with him. Work rounds aren't for discussion of all the physiology of what's going on. Of course, you do. But work rounds are just to find out what's happening to the patient. That's the time to check things out, sort of everyday things. What you want to talk about is what's going on and what should be done for this particular patient."[3]

Work rounds end at ten. At that time, the assistant resident leaves the ward to attend a coffee-meeting with other residents, where he reports the condition and disposition of patients on his ward. While the assistant resident is away and before visiting rounds, which begin at 10:30, interns are free to organize their own work. During this half-hour they may do some of the things that were recommended during work rounds or write orders and requests for things they want other hospital personnel to do for their patients. They may take a coffee break, but even coffee-time is related to their work. The morning coffee break is one of the few times they have to sit during their work day. Break in the routine, as the following incident illustrates, is important:

> A new intern on the ward, Benson, and I entered the kitchen, off the ward. He sat down and started to write in the black book for doctor's orders. Koren, who has been on the ward for a month or so, walks in and says: "I agree, I think it's best to sit down and write your orders. It's too hard to write while moving along /‾on work rounds_7." Benson says: "I always make mistakes when I write as we're walking." Although he had been told by the assistant resident to write his orders immediately after seeing the patient, he waited until he could sit down and do so over a cup of coffee. Koren got a cup of coffee for himself and waited for the order book.[4]

The half-hour between 10 and 10:30 is the only "free" time that interns have during the morning. On Monday, Wednesday, and Friday, from 10:30 to noon, they make visiting rounds on the wards. On other days the latter part of the morning is reserved for special conferences or consultations rounds with staff members of the research divisions and affiliated clinics. "In the middle of the morning," explained an intern, "it's convenient to have a half-hour free to use to do chores and catch up on your work.

Interns break for lunch at noon, though their lunch may be interrupted by lectures or conferences. These conferences may be a presentation of an interesting patient by a medical student, or the more formal combined medical services conferences, which involves physicians from one or all three of the medical schools at the hospital. If interns attend these conferences, and they usually do, they have time for nothing more than a quick lunch before going to the clinic or returning to the wards.

On the wards, interns do much the same kinds of things during the afternoon. One of them, for example, is "on call." When he is the admitting intern, he receives all new patients admitted to his ward during the day. The patients he admits are permanently assigned to him, and he assumes responsibility for their care.

The admitting intern devotes his afternoon to working-up new patients--taking medical histories, doing physical examinations, and making diagnoses. In addition, the intern must do routine laboratory tests. He may draw a blood sample or get a urine or stool specimen which he will examine later. There is a laboratory on or near the ward where he may do blood counts, urinalyses, and other routine tests. Most afternoons are spent in the laboratory or on the wards performing diagnostic and therapeutic procedures.

After working-up his patients, an intern writes up his findings, entering all pertinent information in each patient's chart. As soon as possible after admission, the assistant resident in charge of the ward also examines each patient and writes a "note" a summary of his opinion of the diagnostic and therapeutic problems of each. Though the patient "belongs" to the intern, the assistant resident has the authority to decide the treatment he will receive. Interns must review every case with the assistant resident. Together, they appraise each patient's condition and evaluate the intern's plan of treatment. If the intern's work-up has not yielded sufficient information for an objective appraisal, he may have to return to the patient for additional information or request special diagnostic tests. When interns are not on call, they use most of their time to bring charts up to date, discuss patients with the assistant resident, and arrange to obtain any additional information and assistance they may need to make diagnoses and facilitate treatment plans.

Though it may later be revised, a plan of care for each patient is implemented almost immediately. Interns begin to do things for a patient as soon as they have some idea of his condition and problems. They spend more time, however, in working-up patients and arranging for consultation and special diagnostic tests then in performing therapeutic procedures. Many interns report spending as much time "running around" the hospital as they do with their patients. The following comment is typical:

> On our way back to the ward from x-ray, Woolcot said: "This is how I spend much of my time. We have to run around and make sure things get done. The nurse may say the x-ray was sent over and that it's there, but you have to run it down. At some other hospitals, maybe, you just write a ticket and things get done. Here, you have to make sure. Sometimes, you have to do them yourself."[5]

Working-up new patients and caring for those already admitted is only part of an intern's work. He must also see that his requests are met and his related orders carried out by other hospital personnel. Requesting x-rays, for example, is only the beginning of all that he must do to get a film he can use. Many times porters are not available to transport patients, so interns may have to take them to the laboratory. After the x-rays are taken, interns may still have to keep after technicians to process the film; once they are ready, the intern may call for the films himself, rather than wait for them to be delivered to the ward. Another example is the patient's chart. If the patient has previously been at the hospital, there is a chart containing his medical history and past problems. Since the intern needs that information almost immediately, he must make frequent trips to the hospital's medical records department. All in all, a large part of each afternoon consists of running around the hospital.

Later in the afternoon, around suppertime, the interns and the assistant resident again make rounds. The intern who is on call spends the night at the hospital. During these rounds, those who are not on call inform the one who is and the assistant resident of any problems they anticipate. All interns more or less turn over their patients during the evening to the intern on duty, who cares for them until late in the evening. In fact, the turning over of responsibility is largely symbolic. An intern must remain at the hospital until he has completed his work. "At no time," interns are told, "shall the intern leave without completing his work, recording it, and informing the intern on call of the ward problems."

For the intern the early evening hours are not much different from the afternoon. Most hospital departments have closed for the day. The intern continues to draw blood, collect specimens, do routine laboratory tests, bring patient's charts up to date, write requests and orders, and perform therapeutic procedures. It is to his advantage to do as much as he can that day, because the next day he may be on call, seeing new patients and having other work to do. Most interns work late into the evening, remaining at the hospital until the "night float" reports for duty.

One intern on each service acts as "night float," coming on duty shortly after ten in the evening. The float does not replace the intern on call, who must also remain at the hospital. After 10:30 p.m. admitting and working-up new patients is the responsibility of the night float. If he cannot handle all the work, he may request the intern on call to help with admissions or to treat patients. In the morning the night float presents each new patient admitted, as well as any significant changes in the condition of others. With his report, another day of work begins.

The Work off the Wards.

Like most hospitals, Boston City Hospital provides emergency services and operates an out-patient department.

One of the busiest of these facilities is the accident floor, to which people come or are brought in off the streets. Equally familiar are the clinics--"open" clinics, at which people who think themselves in need of general medical attention are screened, attended to, or routed elsewhere for further attention; "appointment" clinics, for patients who return to a specific physician; and the "specialty" clinics, which provide a particular sort of medical attention. Interns are required to participate in all these activities, except the specialty clinics, and are away from the wards for approximately two and a half months seeing patients on the accident floor or attending out-patient clinics.

Each month one intern is assigned the accident floor with a resident, while others are scheduled to attend to patients at the open medical clinic. Those in the out-patient department arrange a "float" schedule, which allows one of them to assist at the afternoon clinic. Monday through Friday, beginning at 8:30 a.m., interns at the open clinic see patients--either those new to the hospital, or those who have not attended the clinic for a year. Clinic patients who come to the hospital without appointments are assigned to an intern:

> I think the clinic here is sort of a, well, the morning clinic at any rate, is sort of

> a necessary evil in that there is a big population in Boston that has got to be seen by somebody. It's sort of like the accident floor. It's dumping-ground, so to speak, in that you see a lot of trivial stuff but, once again, I think this can be a valuable thing in that this is the way medicine is. You've got to know how to approach a patient with a head injury or a guy with a lacerated hand, as well as knowing how to manage a guy with a heart attack. The clinic is a little bit different from the accident floor in that the problems are screened so that you get things like headaches and sore throats and fainting spells and things like that, but you still see a lot of insignificant problems. Yet, you do serve a very useful function out there because you do see people who don't have any doctor and they come and they do have a complaint and you're their first and last line of defense. You go out there and you see these people and you have to make decisions on them. Do they really have a genuine complaint? What is your plan going to be? You have to decide if they can be handled on the outside or if they need hospitalization...you become their doctor.[6]

Many people in Boston who do not have a regular physician think of the medical clinics at Boston City Hospital as the place to go when they want medical care. Needless to say, not all of them are sick and a good number of those who are, need only some immediate remedy. People who come to the morning clinic confront house officers with random encounters for which they are not completely prepared and about which they must obtain information before determining proper medical approach.[7] Of course, interns perform a variety of trivial medical procedures, but most of their activity consists of working-up patients about whom they know little. The patient charts are a reliable source of information about people who have been at the hospital before, but these are not always available. For first-time visitors, no charts are available. Chart or no, the intern asks the patient about his symptoms and performs a physical examination, seeking signals that will tell him how sick the patient is and what action is warranted. He attends to those who need immediate treatment and evolves plans for handling those who are sick enough to require further out-patient care or admission to the hospital. Many of his decisions are crucial, and, as the following comments indicate, he is given a great deal of independence:

> Schlereth, who had been night float but now was at OPD, joined us for lunch. Doyle asked him how he liked OPD. Schlereth said: "It's a ball! You get to make all sorts of definitive decisions. Do this! Don't do that! I hear the accident floor is even better."[8]
>
> On the way over from clinic to Peabody 3 (the building housing the Fourth Medical Service), I asked Blocksberg what he thought he did most of during clinic. He said: "Getting information from the patient. I think that's the major thing we do on the ward too, or should be doing on the ward. This is more obvious in clinic. We also are much more on our own, make our own decisions.[9]

The intern's participation in the out-patient department is not limited to the morning medical clinic. One day a week he is assigned to the outpatient building, and interns staff the afternoon medical clinic. Unlike the morning clinic, this one is not "open," but is specifically reserved for patients receiving continuing medical care and for those referred from morning clinics. Most afternoon patients have recently required hospitalization. Either they have been the intern's patients on the ward, or he has inherited them during a formal exchange of clinic patients held at the beginning of the year.

Through this exchange, patients of departing house officers are allotted to incoming interns. Together with those he himself admits to clinic from the wards, they become his continuing responsibility throughout his stay at the hospital.

Though the hospital tries to regulate the number of people coming to the clinic by giving afternoon patients appointments with specific house officers, some nevertheless drop by to see the doctor. This, however, is not so much a problem for the intern as it is in the morning. Since these people have been at clinic before, information about them is available. If he has the patient's chart, he need not do a complete physical or conduct an extensive inquiry; he knows the medical histories. Not everyone, however, comes to the clinic with a documented past. Patients from the morning clinic have to be worked up and questioned several times before the intern knows them well:

> I have learned the lesson of following your patients carefully so you can anticipate problems...you're right on your patients. I really found this to be valuable in the clinic. I have a whole raft of people there who I really got to know, who are my friends and when something is wrong I really know. I have a woman in the clinic who never had a complaint for four months, as long as I have known her. Suddenly, she had a severe headache. I admitted her to the hospital right away, and she had blood in her head.[10]

An intern himself sometimes admits to the afternoon clinic people who have been his patients on the wards. He has already worked them up, prescribed for them and treated them while they were in the hospital. Another examination and further interrogation would add little to the knowledge he already has. He is their doctor:

> You nurse them through their period of sickness and then you become their doctor, from then until the time you leave. You set up your appointments. You have your afternoon out there. You've got your own office, your own examining table, and your own desk. Nobody supervises you. You know, nobody sitting out there saying: "OK, you listen to the heart or lung." You do what you want to and follow-up on those patients. This is the way office practices would be. The burden of good medical practice falls on you, because here you don't have the assistant resident or the senior resident, anybody, looking over your shoulder, watching how you manage your clinic patients. If you got a guy with

> a bad lung or heart and he comes in and you don't listen to his lungs or heart, well, there's nobody there to say that you've got to listen to his lungs or you'd better listen to his heart or you've got to take his blood pressure or you'd better feel his pulse. You're a grown-up doctor.[11]

Not all interns are happy about the demands made on them by their duties at the outpatient department. Opinion regarding the clinic experience ranges from a succinct, "It's a pain in the ass," to an enthusiastic, "It's a great experience." Interns' statements repeatedly stress that participation in the activity of the outpatient department, particularly the morning clinic, is a service to the community:

> The clinic, I think, is a good experience when you follow the patients that you have had on the ward, but I think it's unsatisfactory when you are seeking new patients. No privacy, and you see a lot of them in a short time. It goes very quickly." I asked: "You prefer following your own patients to getting new ones in the AM clinic?" Rod replied: "I think you learn more if you follow your own patients. The benefits of a clinic, as far as I'm concerned, is a chance to follow the course of the patient over a long time, to see how they do. The formal purpose of a clinic is to keep them going, take care of them there without admitting them to the hospital. Also, a lot has to do with welfare, evaluating patients for various kinds of disabilities. This is a valid purpose for the community. So in the clinic I think you are performing a useful role, but I don't think you are learning a lot by doing it unless /̄ the person_/ turns out to be a patient you will follow over a long period of time."[12]

Patients at the morning clinic require a lengthy initial examination, but usually there is no reason for continuing medical care. Most of the effort consists of providing immediate but minor medical attention. Similarly, interns consider the accident floor to be a service to the community rather than an opportunity to follow patients:

> I said to Andy, "Over on emergency, it looks like it's more slap-and-patch than anything else." He replied, "Well, that's why I say the major thing you can hope to achieve there, at least in this hospital, is to decide if a person is sick enough to be admitted. If they need only ambulatory care, then you either provide this care or refer them to the outpatient department or the appropriate physician on the accident floor. I don't think you are, by any stretch of the imagination, able to give care on the accident floor. There are too many patients for the number of doctors, and that's why in many respects all you are accomplishing there, at least for a large number of patients, is just routing them to where they can get proper care."[13]

On the accident floor the intern encounters situations that require decisions based on little medical information. No matter what the complaint, the intern must see each patient, sometimes as many as 150 in an eight hour day. He provides immediate care to those who need nothing more, and admits to the hospital those who need more extensive attention. The sheer number of patients he must see prohibits him from doing more than examining for a diagnosis. In short, his examination is geared to decide if the patient is sick enough to be admitted to the hospital. The patients he admits will probably not become his. "You can follow patients that you've admitted to see what happens to them, but it's not often done."[14] Afternoon clinic patients the intern will see over a period of time. He will have an opportunity to watch the course of an illness or observe his patients' progress outside the hospital. This chance for follow-up constitutes what the interns consider the most valuable part of their experience off the wards. (see Table 1).

Another aspect of the clinic work is its similarity to general practice. One afternoon a week interns are able to prescribe for patients and, at some later date, evaluate any change they may have effected. Much of what interns do, of course, is like the activity of a practice, but the coming and going of patients they may never see again and the kinds of patients they do see are hardly representative of a typical practice. Thus interns make the comparison with reservations, noting discrepancies between their outpatient experiences and a medical practice:

TABLE 1.

TYPES OF STATEMENTS MADE BY INTERNS TO DESCRIBE CLINIC EXPERIENCE AT BOSTON CITY HOSPITAL

1964, 1965

CONTENT OF STATEMENT	TYPE OF CLINIC	NUMBER OF STATEMENTS
"It's a service to the community."	AM	9
	PM	3
"It's very much like a small practice of your own. You get to make all kinds of definitive decisions."	AM and PM	18
"It's a good way to follow your patients."	AM	0
	PM	11
TOTAL		41

> I asked if clinic was like a medical practice. Scott said, "In a way, but not exactly." I asked how it was different, and he replied, "For one, the way these people live. Practices are mostly with middle-class patients, and these aren't middle-class patients." Miller: "What does that mean?" Scott: "Well, you have to take this into account when you ask them to do something. They may not do it. You can bet that they're not going to do a lot of the things they should or you want them to do. The middle-class patient will, I think." I asked, "Then why the clinic for the intern?" Scott, "I think it provides services for the community. It's something the hospital has to do."[15]

> This more nearly approximates general practice but is restricted to a middle-aged group. It lets you handle non-emergency and non-hospital problems over a year. You can follow along with individual patients for as long as a year. I think it's very good the way the internship here allows you to spend a period of time every week during the whole year in the OPD. Patients you have on the wards you follow-up in the OPD for that whole year.[16]

Clearly, the patients that come to the outpatient department are not typical of the patients who consult private physicians. They reflect a level of health below that of most middle-income groups in America. Interns are quick to point out that a major characteristic of the clinic patient population is its lack of information about "proper" health practices and habits:

> Mayer told me about his next patient: "She's a 15-year-old who's just started having sexual

> relations and has a urinary tract infection" The girl entered the examining room and Mayer said: "Hello, Jane. Why don't you sit down? How have you been feeling?" The girl closed her eyes, shrugged her shoulders and nodded her head. Mayer asked, "Have you and your boyfriend been taking any precautions?" When the girl looked at him as if she didn't understand, he explained: "Have you been using anything?" The girl shook her head. Mayer: "What would happen if you got pregnant?" The girl shrugged her shoulders. "Are you trying to get pregnant?" The girl shook her head. Mayer nodded and said: "Why don't you get into that dressing gown? We'll be back in a minute." We stepped outside, but didn't go anywhere. Mayer said, "The problem is that they have no concept of basic hygiene. They really complicate their lives at such an early age. This girl doesn't even know how to douche." He turned and we entered the examining room, where the girl was sitting up on the examining table. I sat down on a chair and Mayer examined the girl. When he finished, he wrote a prescription and said, "Now, Jane, I want you to take these now. It's important that you take them as soon as possible. I think they'll cost about $6. Do you have $6?" (The girl said her mother gave her only $5) "Will you be able to get the money today?" "No, not until tomorrow. My mother is out." "Then I want you to get as many as $5 will get you. You should start taking these right away. It's important. You're a young girl now, and if you take care of this, you'll have no trouble, but if you let it go, then you'll have a lot of trouble when you get to be a lady." He then explained the procedure for taking the medication and asked the girl to repeat it.[17]

Interns are able to select patients they know well for continued medical care. It is important for them to be able to observe how people fare after they are discharged from the hospital. The afternoon clinic gives them this experience of caring for people throughout the course of a variety of illnesses. Further, clinics afford an opportunity to exercise medical responsibility. Being required to diagnose and determine the disposition of people who come to the clinic--the making of definitive decisions--makes work away from the wards worthwhile. This exercise of responsibility is only slightly less valuable than the experience of following patients during the post-hospital phase of illness. When the circumstances of work do not permit follow-up on patients or allow interns to make decisions, the interns consider that work as more than a service to the community, a legitimate but unfruitful pursuit.

Academic Activity.

Along with their on-the-job training, interns attend formal lectures and conferences as well as such less formal teaching sessions as the "visiting rounds." The most familiar tableau of medical education is the grouping of students, interns, and teaching physicians around the bed of a patient, all listening to an old and wise physician. Actually, interns spend no more than 10 percent of their time making rounds with visiting teaching physicians.

Visiting rounds take place every Monday, Wednesday, and Friday, between 10:30 and noon. The format and content are determined by the interests of the visiting physicians. They may be conducted as a seminar held away from the wards or in the more traditional round of patients on the wards. Visiting physicians who teach in the sequence of training interns are usually staff members of a research division at the Thorndike Memorial Laboratory. Occasionally, however, they may be young specialists practicing in Boston and seeking an affiliation with the Harvard Medical Unit.

The more academically oriented of the physicians who conduct visiting rounds prefer the seminar format, like that described below, which was conducted by a member of a research division involved in clinical and laboratory studies:

> We entered the laboratory on the third floor of Peabody, where we were to meet Dr. Flexner, the visiting physician. Dr. Flexner and the assistant resident were sitting with their backs to the door, facing the group of students and interns. Schwartz, a student, began the discussion by presenting a patient case: a white 75 year-old male with GI bleeding. When he finished, Flexner asked, "What about test results?" Schwartz asked if he wanted all the results, and Flexner shook his head. "No, just give me the important ones; those that showed something, or those that didn't show something but, for that reason, are important." Schwartz gave the results of blood tests and urinalysis, and described a mass he felt in the abdomen. Flexner asked if anyone else had felt the mass, and Smith, an intern, said he had. Flexner wanted to know if Schwartz had described the mass accurately. Smith said, "I think it was larger than that, probably 4 to 5 rather than 2 to 4 inches." Schwartz then volunteered the information that the patient denied he drank a great deal, but that he and Smith

did not believe the patient. Flexner asked Schwartz to describe the mass in detail and, after he did, wanted a diagnosis. Schwartz said he thought it was an ulcer. Flexner asked what Schwartz would do about the ulcer, saying, "Here we have a real good one for a medical-surgical give and take. The patient is 74 years old and can't stand too much surgery. We could medicate him, but he may bleed again. There are pros and cons on both sides." Schwartz responded that he would recommend surgery. Smith and the others agreed, Smith saying, "I think that statistics show that in 76% of the cases where medical management of ulcers was attempted, patients had surgery anyway. I don't think we will be able to manage the ulcer, and we might as well have the surgery done now." There then was a very technical discussion of what kind of surgery, a partial resectioning or a full resectioning. Flexner said, quite emphatically: "A man of 74 won't stand a complete surgical job. I'd just suggest a partial resectioning." That ended the discussion of that patient.

Bloomfield, the assistant resident, told Flexner that there was one other patient to be presented before we visited the wards. Smith presented the second patient--a 50-year-old male admitted to the hospital for the first time with no past history of cirrhosis and denying he drank heavily or had lost weight. Smith gave the results of all the tests he ran and concluded it was a case of cirrhosis complicated by diabetes. Bloomfield said, "Well, we seem to be agreed on that, but what if we accept the patient at his word? He says he's not a heavy drinker; let's assume he's not." Smith shook his head and said he was certain the patient was a heavy drinker. Bloomfield said, "I'm just trying to make this interesting." Looking at Smith, he again added: "What if we do accept the man's word?" Someone said, "Hemochromatosis." (A disease of the skin and viscera affecting pigmentation, called "Bronzed Diabetes"). Flexner laughed

> and asked, "Do you really want me to get started on that?" He then described the drinking habits of an African tribe frequently suffering from cirrhosis and hemochromatosis. Flexner reviewed relevant publications, beginning with a monograph by Sheldon published in 1935, and went on to explain the social and biological conditions thought to account for the disease. His concluding remark was that there was not enough data and that the topic would be an interesting one to study. Although he talked about this for a good half hour, everyone agreed that the original diagnosis was correct. I had the feeling that Smith and Bloomfield had purposely led the discussion to a topic that was of interest to Flexner. Only 3 percent of the Africans drinking iron-loaded beer suffer from hemochromatosis, so it's unlikely that the disease is a big problem at the Boston City Hospital. By the time Flexner finished, we were behind schedule. Bloomfield led the group out of the lab and to the ward where they made an abbreviated round of patients.[18]

In contrast to an academic discussion of interesting diseases are the patient-by-patient rounds, usually conducted by physicians interested in patient care as well as the study of disease:

> Peterson, Hink, Schwartz and I left the laboratory on Peabody 3 to return to the ward and meet Dr. Blocksberg, a clinical associate, who was the visiting physician for June. Freeman, the assistant resident, introduced us to Dr. Blocksberg. As we entered the ward, Blocksberg said, "I think we will just look around at the patients and see what you have." The first patient was a white female with an ulceration, presented to Blocksberg by the intern Hink. Dr. Blocksberg was concerned that the students and I (at the back of the group) were not hearing the presentation and repeatedly asked Hink to speak up. The next patient was presented by Peterson, who was immediately told to speak up.

This patient was a female admitted for a myocardial infarct; she had been in bed for ten days. After examining her, Blocksberg asked Peterson what he was doing for her. Peterson told him what medication he had prescribed. Blocksberg said, "That's good. That's standard procedure. How about getting her up out of bed? Can't we tie her comfortably in a chair?" Before Peterson could answer, Freeman asked, "Sir, don't you agree with our policy here of complete bedrest for an MI?" Blocksberg said it could be done both ways, explaining: "I think that older people deteriorate very rapidly in bed. That it's better to get them up in a chair. They have by this age developed some collateral circulation. The younger patient who hasn't developed any degree of collateral circulation would be treated differently." Peterson was nodding his head. Freeman said, "I would tend to agree with you that the patients when they are older deteriote in bed, but (pointing to a chair) you can see that we don't have the best equipment. I know that over at the Brigham they have special chairs, but here we just have these straight wooden chairs." Blocksberg said the equipment was not the best, but that something could be worked out. Then he told us of how he treats a 96 year-old female: "I have never had her on complete bed rest, and she's had infarcts twice." We moved on to the next patient...

The next patient, presented by Hink, was a middle-aged female who had been in the hospital for three days, running a fever of unknown origin. Blocksberg asked Hink what he thought, but Hink just shrugged his shoulders. Blocksberg asked what was being done for her, and Hink told him he had put her on sulfanilamide and asked what he would suggest. Blocksberg: "Well, before the days of wonder drugs and antiobiotics we used ice cold boric acid compresses, as cold as you can get them. Put the boric acid right in a bowl of ice cubes." Hink asked, "Four percent solution?" Blocksberg laughed and said, "You

> can't do better than four percent no matter how hard you try. Four percent is it. Just put enough in so there's a little residual at the bottom that will be absorbed when the ice cubes melt."
>
> The next patient was a jaundiced middle-aged female. Blocksberg examined the patient, palpating the liver. He said, "There is an unusual liver edge. If they haven't already felt this, the students should feel this. It's always good to feel a liver edge once." After his examination of the patient, he said, "I don't know too much about the liver, but I would certainly be interested in hearing the opinion of someone who does." A senior resident asked a few questions, but we had to go to a student conference, so this had to be the last patient for the day.[19]

Interns, students and residents on a ward meet with the same visiting physician three mornings a week for a month. The purpose of visiting rounds is to inform interns, students, and residents about diseases and their management by bringing them together with physicians who have a great deal of specialized knowledge and experience in a particular area. The following comments illustrate why interns think specialists make good visiting physicians:

> With a visiting physician who specializes, you have the opportunity to discuss interesting cases in detail and go into a particular kind of illness or disease with which the visiting man has had a great deal of experience. You can discuss your case and compare it to others he has seen. There are points where your case is different from most and others where it is the same. He's seen the course of that disease many times, and you haven't. He might be able to offer very good suggestions for therapy that you don't know about, but that is not what you really get from a visit.

> What he does is help you learn about the illness and disease, not about medicine in general. I think the bulk of medicine that you learn as an intern, that is, the practical information you need to take care of patients is drilled into you by residents and other house officers.[20]

The advantage of having visiting rounds with a physician specializing in a particular disease is, of course, that it affords an opportunity to learn a great deal about that one disease. Interns, then, learn by vicariously sharing a specialist's experience with his particular area of medicine. On the other hand, if a specialist dwells too much on one disease, interns can grow tired of learning what he knows:

> Freeman walked into the laboratory to find out if anyone had admitted a new patient that would be an interesting case to present to Mogey, the visiting physician. No one had admitted anyone of particular interest during the night, but a student had had a patient die and thought she would make an interesting case. Freeman said: "Well, she's interesting, but I don't know." The student told him that Mogey was up on her problems, and Freeman nodded and said: "Okay, why don't you present her." He turned to Rubin, the intern on his ward, and told him they would not be presenting his patient to Mogey. Rubin asked: "Why not? I'm tired of hearing about cardiology. All month long I've heard about cardiology." I asked what was wrong with cardiology, and Rubin told me: "These damm visits know only their specialty. We're supposed to become rounded physicians, but these guys don't know anything beyond their specialty. How are you going to become a rounded physician? I'm not kidding. I am tired of these guys who know nothing else." He turned and walked away. Freeman told me it wasn't that bad and it might be an interesting session with Mogey.[21]

The fact that visiting rounds are for the benefit of medical students makes them less interesting for interns and residents:

> I don't like the philosophy of visiting rounds here. Here they are to give the students a chance to present to the visit, which is all right. But I think we frequently hear about cases that are not that interesting. I think the visiting time could be much better used by going to the problem cases on the ward and trying to get sophisticated opinions on them. On rare occasion, if there is a really interesting case, the intern will present it. Visiting rounds are for students. In the course of them, we [interns] learn some very valuable and interesting things, but not always are they the problems on the wards.[22]

If visiting rounds are to be interesting for interns as well as students, the interns must somehow manage to present the visiting physician with patients they feel could provide interesting teaching materials: "If the visit is really strong in a particular area and we can find him a case, we present him with one he could talk about rather than something else."

Students are responsible for preparing and presenting most patients for discussion during visiting rounds. Most often, however, the patients are actually picked by the interns and the resident. As one might expect, students wisely accept the patients the interns and residents select. Usually the selection of an appropriate patient is enough to make for interesting visiting rounds. Given a chance, physicians with extensive experience are able to find something interesting to say, unless the student has thoroughly covered the topic. For that reason interns assist students in preparing their presentations:

> I asked Midlander /‾medical student‾/ what he had learned /‾from interns‾/ in the last month. "A lot of little tricks of the trade." I asked what he had learned about presenting a patient. He told me, "The first time I presented a patient, I didn't know what the visit wanted, but you learn, and you get to know what is and what isn't important. I've learned not to present everything. Always leave something for the visit to find. At first I was always pressed because the visit would ask me this and that, what he wants other people to know about the patient. Now I just present that." "Why," I asked, "do you leave something for the visit to find?" "If you don't," he answered, "then he is pressed for something to say and gets a little touchy. Even if I have all the consults in and I know everything about the patient, I always hold back until after the visit has his say."[23]

Visiting rounds of the sort described below move interns, students, and residents to take steps that, hopefully, provide plenty of content for discussion:

> Schooler /‾intern‾/ was presenting, and Murphy /‾student‾/ was holding the x-rays for the patient. Schooler described the patient as a 65-year-old male, admitted for the second time and gave the results of his examination, tests, and consults /‾with specialists‾/. When he had finished, Maxwell, the visiting physician, looked at him and asked, "Well, what's the problem?" Schooler looked around, smiling at Jordan /‾senior resident‾/. Maxwell asked a couple of questions about the results of tests, and Schooler, referring to the patient's chart, gave the answers. Murphy was looking at the x-rays, and the

> assistant resident, seeing him, said, "The x-rays are interesting and might be of help." He handed them to Maxwell, who turned toward the window to look at them, then said, "I agree. It's acute congestive failure." After a period of silence, he continued: "We can rule out viral infection, as well as any other possible difficulties. It should be treated as congestive failure." There was more silence. I made a note to ask Schooler why this patient had been selected for presentation. Jordan, the senior resident, asked Maxwell what he thought of trachea punctures with a needle, to introduce a fine spray of saline. Maxwell: "I'm for it. It's fine if we had someone to do it. Hopefully, we will have someone to do it next year; I'm in favor of it, but not by everyone and everybody." In the medical history of the patient presented had been the fact that he had been asthmatic for 12 years, but that the asthma remitted and he began smoking. Schooler asked, "To get away from the subject for a while, is there any explanation for remitted asthma?" Maxwell said all he knew was that if it doesn't remit, the patient dies. The group laughed. The rounds dragged. I had the feeling that the patient wasn't exactly an exciting one and that the interns, assisted by the assistant resident and the senior resident, were trying to kill time. It was about 11:45. Maxwell had looked at his watch a number of times before, but now he nodded and started to get up. No one said a word. He got up and started to leave. People stood, but no one said anything but the senior resident, who thanked him. Maxwell nodded and left. The assistant resident said something to the senior resident as Schooler and I started toward them. Schooler said to the senior resident, "Yes, why did you want that patient presented, Dr. Jordan?" The three of them laughed and Jordan asked, "Who did we have that was better?"

Only four and a half hours each week are spent on visiting rounds, but interns, students and the resident must prepare carefully if those hours are to be worthwhile. The visiting physician does not prepare a lecture or other teaching materials. He simply walks onto the ward and responds to patients and their problems with opinions and examples from his own clinical experience. If he has had little experience with the patients and problems presented him, visiting rounds are merely an occasion for him to confirm what the interns and students already know. This being so, interns, students, and residents accept the responsibility for making rounds interesting. In fact, they base their actions before and during visiting rounds on the assumption that a good visiting physician is made and not born. By selecting patients and deciding what information they will present to the visiting physician, they influence the content of teaching on the wards. The visiting physician plays only a small part in determining the content of visiting rounds.

Interns, students, and residents need some knowledge about the visiting physician before they try to influence him. Their anticipation of his response to the presentations determines which patients are selected and how. This knowledge, then, determines the content and direction of teaching on the wards. No matter who the visiting physician may be, they want him to be interesting, their approach to him is calculated to obtain information about illness and disease in his specialty. They do not, however, want more information than they think they need. Thus, the interns and others on the wards not only partake of but attempt to control the academic activities of the internship year.

Interns spend an additional six and a half hours each week attending lectures and conferences. In addition, they spend an hour and a half every other week making chief's rounds, which do not differ in format from visiting rounds. Another four and a half hours are scheduled for consultation rounds, held by staff members of the various research divisions and affiliated clinics of the Thorndike Memorial Laboratory. On Tuesday, Thursday, and Saturday, from 10:30 to noon, interns are expected to attend these specialty conferences, which focus on particular areas of medicine. [Figure 1 lists the conferences for October of 1964.] In one month, October 1964, interns were scheduled to spend a total of 30 hours listening to discussions of pertinent research, diagnostic procedures, and the more recent treatments.

Interns do little more than attend this sort of activity. They do not select patients, collate laboratory results, obtain x-rays, or arrange the numerous other things they must do when presenting patients at visiting rounds. The fact that they have little to say about the content of consultation rounds, clinical pathological conferences, and such activities gives them a low opinion of their value:

II & IV (HARVARD) MEDICAL SERVICES
BOSTON CITY HOSPITAL
October 1964
SCHEDULE OF CONFERENCES AND CONSULTATION ROUNDS

Thursday, October 1	10:30	Peabody 3 Conference Room	INFECTIOUS DISEASES CONSULTATION ROUNDS - Dr. Maxwell Finland
Friday, October 2	12 Noon	Dowling Amphitheater	CLINICAL CONFERENCES - Respiratory Acidosis - Dr. Jordan Cohen
Saturday, October 3	10:30	Peabody 3 Conference Room	GASTROINTESTINAL CONSULTATION ROUNDS - Dr. Norman Zamcheck
Tuesday, October 6	10:30	Peabody 1 Foyer	CHIEF'S ROUNDS - Dr. Albert O. Seeler
Thursday, October 8	10:30	Peabody 3 Conference Room	PSYCHIATRY CONSULTATION ROUNDS - Dr. Philip Solomon
Friday, October 9	12 Noon	Mallory Amphitheater	CLINICAL PATHOLOGICAL CONFERENCE - Dr. David Littman
Saturday, October 10	10:30	Peabody 3 Conference Room	PULMONARY CONSULTATION ROUNDS - Dr. Theodore L. Badger
Tuesday, October 13	10:30	Medical 5 Nurses Desk	CHIEF'S ROUNDS - Dr. Maxwell Finland
Wednesday, October 14	11:30	Dowling Amphitheater	COMBINED SERVICES CONFERENCE - B.U. in charge
Thursday, October 15	10:30	Peabody 3 Conference Room	NEUROLOGY CONSULTATION ROUNDS - Dr. Richard F. Mayer
Friday, October 16	12 Noon	Dowling Amphitheater	THORNDIKE RESEARCH CONFERENCE - Dr. Maxwell Finland
Saturday, October 17	10:30	Peabody 3 Conference Room	COMBINED ROUNDS - Dr. Franz J. Ingelfinger
Tuesday, October 20	10:30	Peabody 1 Foyer	CHIEF'S ROUNDS - Dr. Charles S. Davidson
Wednesday, October 21	12 Noon	Peabody 3 Conference Room	STUDENT CONFERENCE - Barry, Selden
Thursday, October 22	10:30	Peabody 3 Conference Room	DIABETES CONSULTATION ROUNDS - Dr. Norbert Freinkel

SCHEDULE OF CONFERENCES October 1964 - cont'd

Friday, October 23 12 Noon Dowling Amphitheater
COMBINED MEDICAL-SURGICAL CONFERENCE

Saturday, October 24 10:30 Peabody 3 Conference Room
RENAL DISEASES CONSULTATION ROUNDS - Dr. Maurice B. Strauss

Tuesday, October 27 10:30 Medical 5 Nurses Desk
CHIEF'S ROUNDS - Dr. William B. Castle

Wednesday, October 28 12 Noon Peabody 3 Conference Room
STUDENT CONFERENCE - Cox, Hufnagel

Thursday, October 29 10:30 Peabody 3 Conference Room
DEATH MEETING - Dr. Richard A. MacDonald

Friday, October 30 12 Noon Dowling Amphitheater
CLINICAL CONFERENCE - To be announced

Saturday, October 31 10:30 Peabody 3 Conference Room
CARDIOVASCULAR CONSULTATION ROUNDS - Dr. Laurence B. Ellis

> Conferences are held, I think, for the people who give conferences. It's work for them, and they feel great about it. They think they're really doing something important. They sit down the night before, get a little nervous, and write. They construct something. They built their talk. The next day, they know what they're going to say and deliver it and, they think it's great. I'd love to do it. It's almost like teaching, and they probably benefit the most. But it does get repititious. I think somebody delivering the CPC [clinical pathological conference] gets more out of delivering it than somebody in the audience listening to it. Maybe that's why we have so many conferences, because people like to give conferences.[24]

Although interns are not required to prepare for most academic activities, they must attend them. When attendence drops off, they are reminded that these are considered an important part of the intern year. The Schedule of Conferences and Consultation for December, 1964, for example, carried the following note: "All full-time and those part-time members of the Harvard Medical Unit on duty at the hospital are expected to attend the Friday noon conferences and the Combined Services Conference." All in all, interns at the Boston City Hospital are expected to participate in 20-odd hours of visiting rounds and to attend another 30 hours of conferences, meetings, and other events each month.

FOOTNOTES.

1. July 17, 1964.

2. July 27, 1965.

3. May 25, 1965.

4. July 31, 1964.

5. June 10, 1964.

6. Assistant Resident, Medical Clinic, Dec. 15, 1964.

7. Interns at morning clinic face social situations similar to those of salesmen facing customers who have simply "dropped in" at a retail store. Since he is not completely prepared for this "cold call," the salesman often finds it difficult to determine a proper sales approach. An intern likewise attempts to evolve hypotheses about this particular patient and modify his action in terms of his understanding. Cf. Stephen J. Miller, "The Social Base of Sales Behavior," Social Problems, 12, 1, (Summer, 1964), pp. 15-24.

8. Interns, House Officers' Dining Room-July 28, 1964.

9. Intern, September 10, 1964.

10. Intern on the ward, May 19, 1965.

11. Intern, December 15, 1964.

12. Intern, June 18, 1965.

13. Intern, May 3, 1965.

14. Intern, June 18, 1965.

15. Intern, September 21, 1964.

16. Intern, Medical Clinic, May 3, 1965.

17. Intern, OPD Examining Room, Sept. 10, 1964.

18. Visiting rounds, June 10, 1964.

19. Visiting rounds, July 1, 1964.

20. Intern, June 18, 1965.

21. Peabody Building, June 21, 1965.

22. Intern, June 2, 1965.

23. Medical Student, June 29, 1964.

24. Intern, December 23, 1964.

CHAPTER 6.

LEARNING AND TEACHING THE ROPES

The Harvard Medical Unit's place in today's medical elite has implications for the work of interns at the Boston City Hospital. It may well be, in fact, that elite status creates working conditions unlike those of other internships.

The primary purpose of the elite segments I have defined is not teaching or patient service, but medical research. This is not to say that the physicians of the Harvard Medical Unit are not interested in teaching, but they consider it less important than their other work. Though all physicians of the Harvard Medical Unit take part in the training programs, they are engaged in research of their own and are not readily available to interns and residents. Even if they were more accessible, much of their research is not particularly helpful to the intern in his main task of working-up and taking care of patients. Of course the investigations are pertinent to the problems of patients, but few research results are immediately applicable as therapy.

Since the physicians of the Harvard Medical Unit have only a limited amount of time to devote to teaching, their contact with interns is limited to conferences, lectures and occasional consultations on the wards. In their actual work interns receive little, if any, help from Harvard physicians.

Interns arrive at the hospital with some knowledge of what their work will be. They have learned a great deal from books, lectures, conferences, and clinical work at medical school. How they will do their work, however, is something they must learn from others, not the Unit physicians. They all face the initial problem of learning the ropes. Who will be their teachers? And what do they learn?

Learning the Ropes.[1]

Newcomers in any social situation go through an initial process of learning the ropes - finding out who people are, where they are located, what they do, what they expect the newcomer to do, and how they want him to do it. We seldom dignify this process by calling it "learning." Educators may attempt to cover the kinds of things a newcomer must learn in brief orientations, but they expect everyone to make an adjustment to the school, the hospital, or the organization. The newcomers who do not learn the ropes are more likely to get attention than those who do. When they adjust successfully, no one thinks anything more about this part of their learning experience.

Sociologists, however, have long been interested in successful situational learning.[2] Let us examine the process of initial learning on the Harvard Medical Services at the Boston City Hospital.

After a short meeting when the physicians, nurses, and other hospital personnel are introduced, the intern goes to the wards or clinics to which he is assigned. Supposedly, he is ready to do his work. Actually, however, he must successfully negotiate the process of initial learning in order to do what is expected of him and before he can initiate other kinds of learning.

The intern begins his training in a familiar environment. He has been in hospitals before and has some idea of what interns do. He comes to his new duties with the confidence of a good medical school record - without which he would not be in the Harvard program - and the newly acquired authority of a medical degree.

He enters a highly differentiated hierarchy of medical and hospital personnel, each group a potential source of situational learning. He does not begin at the bottom of the total hospital structure but immediately fills the central position accorded a physician. Students, nurses, and other hospital personnel are his subordinates; patients, in his immediate care. In the hierarchy of physicians, he ranks beneath the assistant resident, who supervises his work and was himself an intern only last year. Above the assistant residents are senior residents, a chief resident, the program director, and research and consulting physicians.

The intern has a clearly identifiable peer group. The 16 admitted to the program each year, though small in number, have the advantage of being a cohort, or class who pass through a career stage together. Furthermore, they rotate in groups from one ward to another and see one another frequently during rounds, in the laboratory, and at conferences and meals.

From the outset, his superiors encourage the intern to define his chief responsibility as getting his work done. His work is caring for patients. Getting it done, however, is not just a matter of performing a series of tasks. He must base his diagnoses on information provided by other hospital personnel, as well as on what he himself discovers. The treatment he prescribes may be carried out by still others. He must have the cooperation of others in running tests, taking x-rays, and getting medical consultation. Since in many respects his job is administrative, he must learn to manage people so that events proceed rapidly and in proper sequence.

At the beginning of his internship the new man faces a number of problems, some of which result from the ambiguity of being both the physician in charge and a neophyte with much to learn. He carries out his duties under the eyes of the assistant resident and other physicians - men whose good opinion he needs. At the same time, he is in the somewhat uncomfortable position of having to learn from students, nurses, and other staff who lack the authority of a degree in medicine, but who know the ropes at BCH.[3]

> Field said, "On my ward, I'd be lost without my student. He just took over. There I was. I didn't even know what forms to fill out, but he did. He didn't have to, but he filled the forms out and really helped me out. I wouldn't know what the hell to do if it wasn't for the students on the floor."

Where forms are kept, which ones to use, and the niceties of filling them out are administrative details the intern must learn if his work is to go smoothly. Nevertheless, they are details - not the kind of information for which a man wants to bother his superiors - and the student makes a convenient source.[4]

Nurses teach other routines, often crucial for the care of patients.

> (The patient's) feet were uncovered; they were horribly scaled and dirty; the nails had been allowed to grow and become twisted and gnarled. Andrew turned to me and said, "That's the way witches must look. I think it's just dirt and failure to cut those nails. We'll have to have someone look at it. It's interesting though." We returned to the ward kitchen. Andrew mentioned the woman's feet to the nurse. In response to his question about scissors with which to cut the toenails, the nurse said, "Oh no! Don't do that. Put in for a consult with Dr.B. in the diabetic clinic. He's the foot man. The only one around. He'll come and use a saw."

Thus the nurse saved the intern from possible error, and gave him two pieces of situational data. First, he learned something of the limits of his responsibility: In this hospital interns need not perform a procedure that entails risk of infection for the diabetic patient. Second, to his growing fund of administrative facts he added a name (Dr. B.), a place (the diabetic clinic), and a procedural arrangement (consultation).

The intern does not always find nurses so helpful. Soon he begins to recognize how much he depends on them to carry out the treatment he orders.

> I heard Andrew say to Holt, "I'll tell you, the nurses can make your internship hell. "How?" I asked. Andrew replied, "Well, they just won't do things for you if you don't handle them right. You have to flirt a little, never appear heavy-handed, and just jolly them along." I asked, "Do you mean that if you don't do this, they won't do the things they have to for you?" Heath (medical student) said, "I think they just won't do anything for you." Holt nodded and Andrew said, "That's right. If you want to make things easy on yourself, you have to get the nurse on your side."

For these interns at least, learning to manage nurses is part of learning the ropes.

The intern also learns the ropes from the assistant resident. Like the teacher in the business-machine school, this man makes himself almost continuously available. During rounds when they are together at the bedside, he tells interns about important policy on the treatment of various diseases, explaining it and outlining the steps to follow in carrying it out.

> The next patient was a myocardial infarct. Wilson (assistant resident) turned to Bud (intern) at the bedside and said, "We keep them three weeks right in bed, up in the chair the early part of the fourth week, and discharged at about the fifth week." Bud said, "No kidding? Really?" Wilson said, "That's what we do here." Bud said, "What do you think of that?" Wilson remarked, "I like it. Obviously, if we're doing it here on the ward, I like it. What do you think?" Bud said, "It's so different from what I'm used to. We usually had them up at 36 hours. Do you have any trouble with phlebitus?" Wilson said, "We have had some, but we have to watch for it. We could do it (get them up earlier) if we had the equipment. If we had the special chairs and all that. But we don't have them. If we did, your way would be easier. Here, this way is best."

In explaining medical policy at BCH, the assistant resident is tactfully careful to respect the intern's knowledge of good practice elsewhere. His job, however, is to persuade the new man to follow Harvard ways.

It is the assistant resident who tells the intern how to integrate sequences of medical treatment with administrative rules in order to avoid delays.

> The first patient had been admitted in coma. Andrew had stayed up with her most of the night. Wilson (assistant resident) said, "I think she's coming around. When she does come around all the way, I see no need for the IV. You can start her eating. When she is eating, just call the executive office

> and take her off the danger list. You can't discharge them right from the danger list. If it's at night, call the main desk and let them know."

Thinking ahead so that medical contingencies and hospital regulations do not conflict is one of the important things an intern must master.

He makes more progress toward control of his work by a process interns call "running around."

> Rodney said, "Let's go over to x-ray and see if we can't squeeze these pictures in." We walked across the roofs and entered the basement of the building. Rodney had two, a gall bladder and a GI series. Joe, a fellow in a lab coat, asked, "Is it an emergency? Do you want the pictures right away?" Rodney said, "I'd like to get them as soon as possible, but it's not an emergency," Joe said, "Well, follow me; you have to put it in the book then. If it's something you want done right away, or it's an emergency, then either see the nurse or myself." He then led us around the corner, where two officious-looking young men in white shirts with ties and dark trousers were seated with a pile of ledgers between them. The fellow behind the desk asked, "Is that right? Is that the way you want it done? The GI first, then the gall bladder?" Rodney said, "That's not my preference. I just want to get the pictures taken as soon as possible." The fellow behind the desk said, "Well, that's the way it's usually done. We do the GI first, then the gall bladder." He began thumbing through his ledgers. He assigned the GI for the next day. Joe said, "Well, maybe you'll be able to get the bladder done the day after. Good luck." He left. The fellow behind the desk said, "I don't know about the gall bladder." Rodney asked, "What about the next day, isn't it free?" The fellow thumbed through the ledger again, never letting us see

> the date, and said, "No, there's no way of getting her in. We're just booked solid. There is no other time before next week. The barium doesn't clear out that quickly anyway." Rodney shrugged his shoulders and agreed to the dates. We left and he said, "There's a hell of a lot of running around you have to do here."

Thus, by encouraging him to follow certain schedules and routines, hospital employees train the intern in what, in their view, is the proper performance of his duties.[5]

In time, the intern learns to handle these situations.

> "In the beginning," Bud told me, "you think you really have to do things that way, and you do everything hospital employees tell you to. How the hell do you know what's what? But now, I think I know how to get what I want."

By understanding work that lies outside his area of responsibility but is directly related to his own efforts, he increases the possibility of controlling the sequences of his work.

In a relatively short time the intern grows familiar with his new situation. His central position gives him access to a variety of sources of information. The prestige of his medical degree may well ease his dealing with some groups, but it sometimes fosters ambiguity by suggesting that he already knows the ropes he is trying to learn. His previous education may have fitted him to manage his patients medically, but he still has to demonstrate that he can handle his administrative responsibilities.

The intern could turn to the assistant resident for all the information he needs, but he does not. Instead, he accepts teaching from each group whose work intersects with his. Learning about their work at first hand, he builds personal relationships that facilitate his own. As interaction continues, he learns how to joke with nurses and negotiate with technicians to secure their cooperation. So much of his work is managerial that he must understand other groups in order to achieve a measure of control over them and over events.

Learning the ropes is not simply a matter of acquiring facts about people, places and things. It is also a matter of learning how to deal with them successfully. All interns must take the same first steps. Success entails the mastery of skills apparently unrelated to graduate training in medicine.

The intern, like all organizational newcomers, must make a social map of his surroundings and relate the actions of others to his own. Although he is unlikely to formulate his ideas clearly unless action presents problems, he nevertheless defines his situation and acts on the definition. He seeks out those groups whose work affects his own in order to learn their habits and circumvent delays.

Peers, subordinates, auxiliary personnel - in fact, any frequent contact - may become sources of situational learning. Moreover, interns are capable of considerable ingenuity in finding teachers. If those who should teach them are not available, they turn to peers; if peers are unavailable, they use subordinates. Supplied with both superiors and subordinates, they tactfully exploit them all. Evidently they know that failure to learn the ropes may preclude learning anything else. If the intern does not learn whom to consult and how to secure his help, he will not learn what the consulting physician can teach him about medicine. If he does not learn to get on with his fellows, they will not teach him what they may have learned, and he may not discover important things about how to do his work.

If, as it may be, the capacity for situational learning is distinct from that for ordinary learning, interns (and others) who fail in training may do so because they have not learned the ropes - which involves techniques seldom included in the ordinary school curriculum.

Succession and Teaching the Ropes.[6]

A fact of the teaching hospital's organization is that people periodically vacate the positions they have had, and other people come in to fill the vacancies. Interns arrive at the hospital about the same time each year and leave, or at least vacate their positions as interns, at the end of the year. Almost simultaneously, new interns arrive - supposedly ready to do their jobs.

At the time of succession there is little time for orientation or indoctrination. The work on the wards and clinics goes on. There is no way to halt the hospital's operations until the newcomers have learned the ropes. The intern, much like the new worker described by Bensman and Gerver,[7] is introduced to the techniques of getting things done as he comes face-to-face with the problems and duties of his job. How, then, do interns learn what problems face them and what their duties are? Since no one is designated to teach them these things, are they allowed simply to go their own way? This is, in fact, how they do learn a great deal. But interns left entirely on their own would disrupt hospital routine. Therefore, the training program must be structured so that succession may take place with a minimum of difficulty. All interns must take the same beginning steps. Training programs, however, may be set up to make those steps easy or difficult.

A number of studies show how occupational groups with permanent positions in organizations prepare people who are entering for a short time.[8] But university or university-affiliated hospitals are somewhat unusual organizations, in that many people hold only temporary positions. Students, interns and residents, whose work is similar, come and go regularly. They are not making careers at the hospital, but are spending time there as a contingency of future careers. An orderly succession of people in temporary positions would be further facilitated by arrangements that would permit them to orient one another.

Most assistant residents at the Harvard Medical Services were interns the previous year. When they move up, they become responsible for the administration of a ward, which includes responsibility for the adjustment of interns. The assistant resident, having only yesterday been an intern himself, knows the ropes and what it is to learn them. Assistant residents teach new interns a great deal about the traditions of the medical services and the hospital's ways of doing things. They are valuable sources because they have successfully passed through situations that the beginners have yet to meet and manage.

Students from the Harvard Medical School come to BCH a month before new interns arrive - at a time when departing interns are looking forward to residencies, either here or somewhere else. By now these interns look upon most of their work as routine, not as the challenge they found it first. They are, in other words, ready to delegate much of their work to other willing hands. Medical students, eager for clinical experience and a chance to exercise responsibility, accept all the work the interns give them.

Although a great deal of work is delegated to students at this time, they are not empowered to exercise much discretion. They are supervised by and must defer to interns. Thus students learn acceptable performance. They do, in fact, co-opt many of the interns' maneuvers and procedures. Shortly before new interns arrive, as a consequence of the time of year, medical students are allowed, to some extent, to take the role of interns. Thus they gain valuable information about the way things work at BCH - information that new interns also need.

The ones in the best position to teach newcomers the ropes are not, as it is often assumed, those who have been at the hospital for a long time, but students who have been only there a month and assistant residents, who have been there a year. First, their work is similar to that of interns. Second, through their ward and clinic assignments they will come in contact with interns every day. Finally, they can help interns without disrupting the routine of the hospital, they need not stop what they are doing.

The Process of Succession.

Not every intern is a newcomer to the Boston City Hospital, a few have been students there. At the time of succession, interns who were students last year are assigned the duties of night float or are placed on call on the wards. At least a few of the incoming interns, then, may be used to assure that work continues without interruption. Interns who were students at the hospital have an advantage that some of them use to facilitate succession.

> In the lab there were three wire baskets on a desk, each containing patient charts and labeled with the name of an intern. There were only a few charts in Cooper's basket. Wallace /̲ assistant resident /̲ was standing next to me. I pointed to the basket and said, "Cooper must be a lucky boy not to have too much to do today." Wallace replied, "Cooper has an advantage, because he knows how to get his work done quickly. He has managed to keep ahead of things and not get behind." I asked if he had this advantage because he knew the ropes. Wallace nodded and replied, "Yes, he was a medical student here."

Later the same day I asked Cooper about his work:

> "Do you like working on the wards?" Cooper replied, "Well, it's not new. I was here as a medical student not too long ago, so I've been on the wards before." I asked him if having been a medical student at the hospital helped when he first came as an intern.

> Cooper: "And how! The tradition here is to have the interns who were last on as students be night float. The night float is on his own, a step up from being a medical student. There's no one to watch over your shoulder, and you take care of everything. I'm sure that's why they pick up to be night float first, because we know what's what."

Apparently those in authority do recognize that new interns must make some adjustments before their work can progress smoothly. At the beginning of the year, they make succession somewhat less difficult. Even so, all the problems are not resolved. Other interns must still learn the ropes before they can also do their work quickly and properly.

Brand new interns depend on those who have information - that is, the medical students and the assistant residents. Students have already completed half of their two-month assignment, but they are now available to teach those who are usually thought of as teaching them.

> When I entered the laboratory, Barrow [intern] had a bottle of urine in his hand. Daily [student] was at a microscope. Barrow in a loud voice, asked: "What do I do now? Oh, I wish I had someone to help me with this." He then poured the urine into test tubes. Daily walked over to Barrow who asked, "And what do we use for testing ph?" Daily handed him a bottle of litmus paper. Barrow said, "Oh, you use this here. We didn't use these at ______. As a matter of fact, I prefer these" (reaching up to a shelf for a bottle of pills). "These are much better." Barrow then put mixed urine and water in a test tube and dropped in a pill, with Daily watching him all the time. Barrow

> shook the test tube and, holding it up to the light, said: "There, that's a good color and tells you everything you need to know." He then repeated the urine test, using the paper strips Daily had handed him. He said to Daily: "You see, now look. What can you tell from that?" Daily shook his head and said, "But you are supposed to read the sugar first. The rest you can read any time." Barrow then measured the urine and used the paper to do his tests, then turned to Daily and asked, "It is 64, isn't it?" Daily said it was, and Barrow left the laboratory.

Thus the intern learned from the student the hospital's way to do a urinanalysis. The student, because of his experience, had the advantage over the new intern.

Since the student does have this advantage, he is able to continue taking the role of an intern. A relationship of this sort between the student and new interns continues for almost, but not quite, all the rest of the student's stay at the hospital. There comes a time when the new intern has learned his way around and no longer needs incur the indignity of student infringement on his work. The exchange of information has reduced the student's advantage and interns have less to gain by permitting them to intrude.

Students, having been given a good deal of autonomy, resent and resist the intern's attempts to regain control of their relationship. What had for a few weeks been a harmonious exchange becomes to some degree antagonistic.

> Kennedy [student] and I walked to my car. I said, "You can never win with Harry [intern]" Kennedy said, "Yes, but he's going to be told off in a couple of days. The other students will tell him off too." When I asked him what he meant, he replied, "Well, we're a spoiled bunch of medical students. The other interns allowed us to take a lot of the responsibility for patients. We didn't have to do much scut work. Now these guys have been a lot rougher and ask us to do a lot more of it." I told him that I had spent the last two days with the interns he was talking about, and that Harry had told MacDonald [another student] to take his day off, that he would do MacDonald's work. Kennedy, said, "Oh, well, Harry shouldn't have done that. MacDonald should do his own work, and Harry should do his." I said that I didn't actually know it was MacDonald's work. I told Kennedy I thought Harry forgot it was MacDonald's day off, and when he remembered, told MacDonald to forget the work because Harry would do it. Kennedy said, "Well, we have been doing a lot of their scut work."

This student did not resent the fact that he had to do scut work so much as he minded having less responsibility for patients. The question of responsibility is a potential ground for conflict when the interns first arrive. Any disputes that may arise, of course, the assistant resident will resolve in favor of the intern. The possibility of conflict, however, exists until the student leaves the hospital at the end of the month. Students who come after them will from the start be subordinate to interns.

The initial problem of situational learning requires an intern to determine his course of action on the spot, as problems arise and his duties are made clear to him. For the same reason he at first accepts medical students as peers, he accepts the assistant resident as his superior. It is his dependence on the assistant resident as a source of information, rather than the authority vested in him that determines their relationship.

The assistant resident, however, is also facing new problems and attempting to meet the demands of a new job. Why, then, should he take the time and trouble to teach the ropes to interns? What does he have to gain? For one thing, his work is facilitated by his having influence as well as authority over interns. The fact that interns depend on him enables him to define an acceptable level and direction of effort without resorting to authority. By tactfully exploiting their dependence, he can control the way in which interns discharge their duties without raising questions about their supposed autonomy.

> I told Greenberg, an assistant resident, that I had read that at one university hospital interns do not immediately get put in charge of patients. The article said that's something you have to earn by demonstrating your competence and even then, a lot depends on the resident. Greenberg said: "Well, the philosophy here is different from that. The interns are the patients' doctors, from the very beginning, and from the first day that they arrive, they are the doctors. The assistant resident sits back. He doesn't abdicate responsibility, but at the same time, he

> doesn't do the work. This is probably the best way because in a very short time interns become confident, more confident than if they had people making their decisions for them. This doesn't mean that people aren't around all the time to help make the decisions. I think that this place is as good as it is because there are always assistant residents around who have been through it all and can give you the right kind of guidance and leadership if you have problems you can't handle.

The same conversation illustrates the part that assistant residents, exercising their influence over interns, play in the process of succession.

> I asked Greenberg what he thought was a good intern, He replied, "You know that the guys who come here are intelligent, and you assume that all of them are good from the start. The really good interns are those who have the right attitude and the willingness to work, and to me, it's as simple as that." Miller: "What do you mean by the right attitude?" Greenberg explained: "The interns who are really good are those who go and get the work done. If an intern starts by going home and reading the journals the night before so he can come back and look smart all around, people sort of, you know, let him know immediately that this is just not the way things are done." I asked him why is wasn't that way, and he replied: "Well, I don't know. I never have been able to figure it out, but it is the spirit that is sort of passed down from generation to generation. People exchange information, but not to impress each other. Nobody jumps on you because you don't know exactly how to treat asthma or you don't know how to treat cirrhosis. They just tell you how in a nice way. When I was on ______________ [during the first month of internship] the boys really just didn't know how to approach a patient. You had to sort of be right on top of things and say to them, "Now, let's get two blood cultures, or the patient may need

> this or that.' Then you tell them how it's done. You have to say to them, 'Well, gosh I really think we ought to do this on the guy.' They get the point and they listen. You don't have to say, 'Do *two* blood cultures.' Now [later in the year] they're asking why it should be done. At the beginning so much of what they learn is information passed on from year to year. Interns assume it's good information because good people tell them to do it that way. For example, if __________ [a Harvard professor] tells us that x is much better than y, then we figure it is. If we hear that when we're interns, when we become assistant residents, we pass it down to the new interns. So much of the internship here is learning what has been done before and what is considered good practice by the group ahead of you."

Besides increasing his influence, helping to break in new interns gives the assistant resident the satisfaction of training successors. His efforts also earn him the regard of interns, which supports his claim to authority.

The particular conditions of the initial relationship between intern and assistant residents, like those between interns and students, do not persist throughout the year. The intern gains experience - the very same kinds of experience for which he values the assistant resident. This, in turn, makes them less amenable to control. There comes a time when interns consider themselves competent to make decisions on their own. By then they have their own standards and a plan of action for making sure their patients receive proper medical attention.

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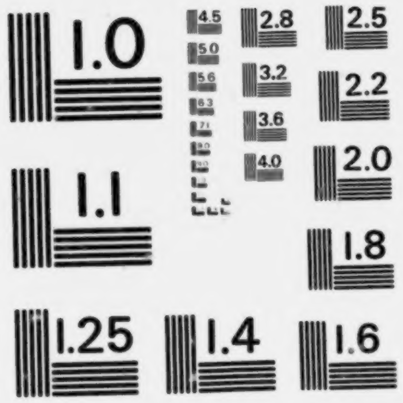
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MICROCOPY RESOLUTION TEST CHART
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Despite this new independence, interns are still influenced by assistant residents. The latter part of the year finds them looking forward to their own residencies. Needless to say, it would not be politic for them to deny the authority of positions they themselves will soon occupy.

The end of the year is also the time when interns will again tolerate student infringement on their work. By this time, they feel they have gained as much experience as they can on this job, so they have nothing to lose by delegating some of their responsibility. Thus another group of students is prepared to teach another group of new interns the ropes. The process of succession will begin again.

FOOTNOTES.

1. The following section first appeared, in most part, as "Learning the Ropes: Situational Learning in Four Occupational Training Programs" by Blanche Geer, Jack Haas, Charles V. Vona, Stephen J. Miller, Clyde Woods, and Howard S. Becker, in *Among the People* (New York: Basic Books, 1968).

2. For example, Donald Roy, "Quota Restriction and Goldbricking in the Machine Shop," *American Journal of Sociology*, 57 (March, 1952), pp. 427-42; Donald R. Cressey (ed.), *The Prison* (N.Y.: Holt, Rinehart and Winston, 1961); and Erving Goffman, *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates* (Garden City, N.Y.: Doubleday and Co., 1961).

3. For discussion of the consequences of admission in cohorts, *see* Howard S. Becker, "Personal Change in Adult Life," *Sociometry*, 27, (March 1964), pp. 40-53; on irregular admission *see* Stanton Wheeler, "The Structure of Socialization Settings," unpublished ms., 1965.

4. This information is not needed, of course, by who were at BCH as students. For full discussion of the overlapping student-intern rotation, *see* Stephen J. Miller, "Training of a Physician," a paper read at the annual meeting of the Midwest Sociological Society, 1965.

5. For relevant analysis, see David Mechanic, "Sources of Power of Lower Participants," *Administrative Science Quarterly*, 7, (December 1962), pp. 349-64.

6. The following section first appeared as part of "Exchange and Negotiated Learning in Graduate Medical Education," by Stephen J. Miller in the *Sociological Quarterly* (Fall 1966).

7. Joseph Bensman and Israel Gerver, "Crime and Punishment in the Modern Factory," in Alvin W. Gouldner, *et al.*, (eds.), *Modern Sociology* (N.Y.: Harcourt, Brace and World, 1963).

8. I am indebted to Robert S. Weiss for much information on this matter. Cf. *Processes of Organization* (Ann Arbor: University of Michigan, 1956.)

CHAPTER 7.

INITIAL AND OPERATING PERSPECTIVES OF AN INTERN

Since all interns face the central problem of coordinating their learning activities with their work, they develop a common perspective to guide their actions. This involves how they define their situation, the goals they set for themselves in it, and a rationale that legitimizes their activities.

The situation, however, is not the same throughout the year. At first the interns' most salient problem is the mastery of their work. This _initial perspective_ is expressed as a set of opinions about their responsibility as interns. It is strongly influenced by the opinions of others at the hospital.

After they have learned the ropes, the interns are somewhat less preoccupied with the mechanics of their work. They have by then mastered much of it. When they are familiar enough with the situation to know what is required of them, they are more or less free to determine their own level and direction of effort. Thus they tacitly evolve an _operating perspective_, or standard of performance, comprising opinions about the relative value of their required tasks and the criteria they use to determine what they need and need not do.

The Initial Perspective.

Interns have a great deal of work to do. The long hours on the wards and in the laboratory are a recognized part of the job. Even the physicians who select interns, concerned as they are with class standing, letters of recommendation, and the other evidences of academic success, acknowledge the almost exhausting amount of work they have to do.

All medical students spend some time at hospitals where they watch interns at work, so they shouldn't be surprised at the work load they themselves encounter as interns. They are surprised, though, if not actually overwhelmed, to discover just how much there is to do.

> In the laboratory I asked Pearson how he felt at the end of his second day at the hospital. "Well, I thought most of what I would be doing would be preparing me to be a physician. I didn't think I would be doing so much lab work and as much nursing as I am. You have to spend a great deal of time doing those things. I knew I had to do some of them, but I didn't think it would take so much time. I guess I just didn't know how much I would have to do. I'm glad to be here. I'm doing what I wanted to be doing. It's just a little overwhelming. I'll get used to it."[1]

Most are also surprised at the kind of work they must do and see in it little relevance to their future careers.

> When I asked Prema how he thought things he was doing would prepare him to be a doctor, he said: "I guess it doesn't really. I prepares you to

> to take care of your patients, I guess. A lot of the things I do, I guess I'll not have to do if I go into practice. It does teach you how to be efficient, I guess. It will help by giving me confidence. It's really hard to say. I don't know. It's just a lot of hard work." Another intern, Zucker, said: "Things aren't too bad. We're all a little tired, but I think we'll get things straightened out. I wish I had time to think. Everything seems to be running into everything else. I'm not sure how, but things are going, and little by little, it's coming. I just want to get all my work done."[2]

Since they cannot say,why interns "guess" that this kind of work will contribute in some way to their becoming competent physicians. They are so busy those first few weeks that they have no time to think about it. At first, they simply accept that the work must be done for some good reason. Interns do not hesitate to talk about the importance of working, but they are hard put to justify their particular assignments.

> I was sitting at a table with Perkins /‾intern_/, eating lunch. Perkins shook his head and said: "It's not the physical work. I'm big. I feel right now physically able to do more work and get with it, but it's the emotional strain." Gallagher /‾assistant resident_/ joined us at the table. Perkins nodded to him, saying: "If I were him, I'd be mad at me all the time. I just make stupid mistakes, and foul everything up. I just don't seem to get things straight, and so I don't get things done. It's important to get all your work done and I'm not doing that. I'm not getting my work done." Gallagher said: "Stop worrying about it. You need your strength." Perkins shrugged and said: "I'm strong enough, but am I smart enough to do the work?" Gallagher: "That has nothing to do with you." Perkins: "I know, it's the place. It's this place. Each place

> has its own style of wardmanship, but I'm just not finding out what it is." Gallagher reassured him, "Don't worry about it." Perkins shrugged. He finished his meal and said: "I'd better get back to work." As we left the dining room, he turned to me and said: "I'm really tired. I try to do all the procedures for each patient. That doesn't work. I decided now that I'm going to organize. I'm going to pull all procedures that are the same together and do all of them at once. I don't see any other way of doing it all." I asked him why he had to do it at all. He said: "You have to get your work done. That's a good enough reason."[3]

Most interns are not so desperate as Perkins but all will insist that it is important to do all the work.

> Leishman /‾intern‾/ said: "You go through an experience that means something. I guess I always expected to have responsibility. You don't really know what it is to have responsibility. It always looks so good and easy until you really find out what it means. I really didn't think that these things would take that much time. Everything we do takes time. It takes all day to get your work done, and that's your responsibility. I didn't think I'd have to spend so much time doing lab work, dressings and all that. I just didn't realize that this is what responsibility is." I asked Huber /‾another intern‾/ if he agreed with Leishman. Huber answered, "I think that the thing you have to be is compulsive and get your work done. Spend every morning with the visit or at conference and the rest of the time working. I expected to spend most of my time taking care of patients, and that's what I wanted responsibility for." I asked him what he did have responsibility for and he replied: "We have the responsibility for seeing that everything gets done. That's our job."[4]

Interns don't just say they should get everything done; they actually try to do it. They stay at the hospital until all hours of the night, examining patients, carrying out medical procedures, doing laboratory tests, and writing it all down in the patients' charts. Early the next morning they are back, finishing last-minute chores before another day begins. As if this pace weren't grueling enough, they try to do all their academic work as well, though they may sleep through some of the lectures and conferences.

Apparently, then, interns' initial perspective includes not only a lot of work but an aim to do it all. What I can't tell is why they set themselves such a goal. If they saw clearly that what they were doing would make them better doctors, their relentless drive wouldn't be hard to understand. But they don't see how their present work prepares them for the future. Why, then, even after they have some time to think about it, do they try to do it all?

There are, of course, many possible answers. They may do it at first because they think they have to in order to earn a good residency. Interns soon learn, however, that they are less visible than they had supposed to people who could affect their careers. No matter what their ultimate career goals, their immediate problem is simply to get through the year. An intern could, if he wanted to, get away with a lot less without seriously jeopardizing his opportunity for a good residency. At the beginning of the year, interns are influenced not so much by their aspirations as by their definition of the working situation. They seem to try to keep up with all the work because it is their responsibility. They apply the ideal of medical responsibility to the situation they are in and conclude that as responsible interns they must do it all.

Medical students are told that responsibility for patients is the hallmark of a physician. They look forward to their internships because they will have such responsibility. Much of what interns have to do, however, could be done by someone else, not necessarily a physician. To justify their doing this sort of work, interns incorporate the idea of responsibility into their initial perspective. As students, interns admit, they thought of medical responsibility in terms of management of patients' illnesses. They soon learn though that the welfare of their patients requires more than the diagnosis and treatment of disease. Responsibility, they discover, encompasses not only medical problems but also management of the total hospital situation to gain the maximum benefit for the patients. Thus they find themselves doing nursing, laboratory, and administrative, as well as purely medical tasks.

> I think the shortcomings of this hospital, you know, not enough nurses, all the things you have to do for yourself, and all that are made up for by all the good things about the hospital. You know, you do get responsibility. It's a lot of hard work, but you do feel like you're doing something, accomplishing something. You're doing something, and you're in control. I think of responsibility a little differently now as an intern than I did as a student. As a student, you don't realize that responsibility isn't only for medical care, but it's for all the other things too. You're responsible for all the scut as well as taking care of patients. Even when you know what you have to do and how to do it, it's still a lot of hard work. It's just time-consuming to do everything you have to do, but that's responsibility.[5]

Assistant residents play a key role in fostering the interns' whole-hog attitude toward responsibility:

> Huber and Goode [assistant resident] started rounds and went right on seeing patients through visiting hours. As we went from patient to patient, Huber listed everything that had to be done for each one. Goode wanted to talk. It wasn't too long ago that he and I stood on this ward laughing at the travel posters the interns' wives had put on the wall to add some color. As we were reminiscing, Huber kept motioning us on saying: "Let's go. I've got other things to do. Let's get through rounds." Goode retorted: "Don't tell me let's go. Go on yourself and examine the patient. She's your responsibility." He turned to me and laughed and we followed Huber. At the bedside of each patient, Goode told Huber what had to be done, and Huber added to his list. At the last patient, Goode said: "I'm going to be a real illegitimate child about these patients. We have to record the medications. Either you record nothing at all, which is unthinkable to me, or you record everything. We have to agree

> disappointing. I really do enjoy athletics. I really missed having the time to do some of the things I was looking forward to, but when I first came here, I just jumped right in doing everything. Now, I want to get out of here so I can go home and do some of the things I like to. I'm getting home earlier, about 8:00 or so. I never had any time before, because I would stay here until 11:00 or later trying to do my work.[7]

Interns who are engaged have little time to spend on dates.

> Benson [assistant resident] told us that he and his wife took short trips to the South Shore, but never had time to go all the way to Cape Cod. Smith [intern] joined us at the table, asking Butler [intern], "Is your honey coming in this week?" Butler: "Yes. I told her to come in, and I think we'll get out even if I don't have my work finished." Smith laughed. "That's all right. You should finish your Thursday and Friday patients by midnight on Saturday. That'll give you Sunday to tangle. That's not too bad. One day." Butler, also laughing, said, "You're not kidding. It will work out that way."[8]

Married interns have little to spend with their wives.

> On our way to the wards, I asked Smith [intern] how his wife was. He told me that she was staying with her parents. "It had to be done. She thought it would be best. I'm on the wards most of the time and have little time to be home. She deserted me." "How do you feel about that?" He said, "Well, I'm compulsive about my work. She doesn't mind that. I guess I can't mind her being practical. It was a good idea, since I have so much to do here at the hospital."[9]

Though an intern may feel guilty about neglecting his wife, he nevertheless stays at the hospital.

> on this." Goode looked at Huber's list and cautioned him to get everything down. Then they finished rounds.[6]

In so defining interns' responsibility, the assistant resident prescribes a level and direction for their efforts. Goode in effect told Huber what he must do and how much of it he must expect to get done; he was not to stop short of trying to do it all.

The interns initial perspective developed in their first weeks at the hospital may be summed up in four main parts:

1. An internship entails an almost overwhelming amount of work.
2. The work is hard, it is important, because it is somehow relevant to becoming a good physician.
3. Although all the work is not obviously valuable experience, it is the intern's responsibility to to do it. He is not privileged to limit himself to caring for patients.
4. If an intern is not getting his work done, he must find a way to do it. He must organize his effort so as to do everything he has to.

The Reality of Work.

Most interns give up all their leisure time. Though they are permitted, for example, to use the Harvard athletic facilities, few do so. As one said:

> I never used my Harvard athletic card. I may have played indoor tennis a couple of times, but never got a chance to do any of the other stuff. It was

> Smith said; "She's back now. Got back yesterday. I'm on tonight and have to stay here. I felt a little guilty last night. It was her first night back. She gives me no gas about it, but I did want to be home. I had this patient that was just on the line, really sick. I could'nt see any way clear and had to stay around until about 11:00. It's a good thing she was gone the first week, and I wasn't torn between her and work."[10]

During the first month or so interns try to do everything they can. When they do not have the time, they make it by giving up their leisure or sacrificing family life, though they are not happy about having to make these choices.

> Concerned that some tests scheduled by someone at the Harvard School of Public Health would be confused with my study, I went looking for Donnelly, the intern who reacts most vehemently to such demands on interns' time. I asked him if he had a few minutes to talk. He nodded, "I rushed through lunch, so I'm in no real hurry." I asked if he had seen the memorandum about the test. He had not. I gave him my copy. He read it and looked up, saying, "Well, I had a good night of sleep, so I guess it won't upset me too much. Don't worry about it. I don't think any of the guys think it's your fault. I've never seen a place like this. They really push the interns around. They don't really know what we have to do. The intern is the only one who does the work around here. You can't trust the student to do any work, and you can't trust the nurse. It's easier to weigh patients yourself, draw blood, take the patient over to x-ray, just do everything yourself. You ask the nurse to do it, but you've got to check and make sure it gets done. I know what'll happen after this test. We'll all be here late at night. Things like that are a pain. You know, like today. A friend called and said how about a swim. I said sure. I rushed through lunch and wanted to get to clinic early so I would have time for a swim.

> Then this comes up. Well, I have the time, so it isn't too bad. If I didn't have the time, I still would want to do it. I think we all try to do everything they want us to do. I just go along and try to get all my work done."[11]

Like Donnelly, all interns try at first to do everything that is defined for them as part of their job. And it seems that everything is. Even participation in studies like mine was presented as a "*responsibility* to encourage the advancement of knowledge.[12] Interns are told that they should be willing to do all these things because it is their responsibility. After a time, however, they begin to realize that realizing such a goal is impossible. They begin to question the wisdom of some of the things they have to do.

> On my way to the Peabody Building I met Katz, the intern who had been admitting patients yesterday. He raised a hand, shook his head, and said: "I was up all night. I had one [a patient] who kept me on the go all night. I can't sleep very well over there (motioning to the Peabody Building). I'll sleep better there (pointing to the House Officers' Building)." I asked him what was going on. "A conference, a student conference. I'm going to pass it up. You know, you can't do everything you have to do and still stay well. You need sleep. If I try to do everything and go to everything, I'll get sick." I told him he didn't have to explain to me. Katz shrugged, "I know, I know. But you feel guilty if you cut out on something. I don't get much out of them, but you just feel you have to go. Maybe, they're important, but I need my sleep more."[13]

Katz did not, in fact, get to sleep.

> I was at the conference, sitting near the door so

> I could see what was going on down the hall as well as in the room. Marlo and Howell /‾interns‾/ were both dozing, eyes closed and chin on chest. Katz did not attend the conference but he did not get to bed. I could see him going in and out of the doors to the laboratory. He had urine samples, test tubes, and was carrying patient charts, obviously working.[14]

Interns who try to make time to do everything they feel they should have little time for sleep. Staying late at the hospital gets the work done, but lack of sleep makes it difficult to get through the next day. The need for sleep marks the beginning of a change in perspective. They do not abruptly abandon their initial perspective, but gradually take up a new one as they lose more and more sleep. They begin to realize that, try as they will, they are not getting all their work done. Then they get discouraged. No matter how hard or how long they work, they do not manage to attend to all their patients, do all the necessary laboratory work, participate in visiting rounds, and attend the scheduled conferences.

The Operating Perspective.

After a time, then, the interns alter their perspective as they redefine their situation.

> During work rounds, I noticed that interns were not staying with the group, as they had previously done at the beginning of the year. Yesterday

> Hartman left to do some laboratory work. Today Benson left in the middle of work rounds to prepare his presentation for visiting rounds. This is something they've started within the last month.[15]

Hartman explained the change and gave some insight into the new perspective that was evolving.

> When I asked if things had changed, Hartman said: "I think so, but I couldn't say how. Maybe it's just knowing you have to work 18 hours a day. That's the way you come to see it. Just 18 hours a day of problems of patient care." I asked why he was spending less time on work rounds. He said: "Do you think so? I think I spend as much time on rounds. Sometimes I have something I have to do so I'm late or leave early, but that's only if my work won't wait. I don't spend as much time at conferences, I think. If anything has changed, that has. I guess they're not as important as I thought they would be. I don't see them as having much to do with what I'm doing. A month ago, I wouldn't miss them, but now I do whenever my patients get to be too much." I asked how his patients got to be too much. He answered, "You know, here even six or seven patients are too much. I've got enough to do with them and my patients at clinics. The conferences are okay, but if they're not on something I'm interested in, I'll forget it all. Just take care of your patients first, that's the ticket."[16]

Participation in academic activities is the first phase of interns' activity to change as they begin to moderate their efforts.

> I entered the laboratory and was grabbed by Taggert /‾intern‾/. I kicked back and hit his shins. Laughing he asked Cutler for help. Cutler just stood there laughing. He looked very thin, as if he lost 20 pounds. He was chubby before. We all laughed and started for the conference room.

> Taggart took off his coat, but did not come into the room with us. He went to work in the laboratory instead. When I asked him why he had missed the conference, he said, "I've got too much to do. You can't do it all. Something has to give, and I can't get behind on my work. You don't miss much when you miss one of those conferences and I can use the time better to do what I have to do on the wards."[17]

As interns become more and more involved with patient care, they conclude that this work deserves priority over their other activities. Occasionally this choice conflicts with the wishes of those in authority.

> We were making rounds on the ward when a nurse called for help with a patient who had been admitted for a myocardial infarct. The man had never been in a hospital before and was afraid of physicians. We all rushed into his room. May and Kingston /‾interns‾/ were working over the patient, attempting resuscitation. The drama of the situation was increased because the oxygen equipment was leaking and could not be repaired while the interns were trying to save the patient. Everyone was doing something - preparing medications, resuscitating, trying to fix the equipment. A senior resident said, "You're going to have to strip your team down somehow. Decide who should stay, and the others can go. You have May and a student. A nurse too. That's about all you'll need. No?" The senior resident had previously asked if the assistant resident was going to go to coffee rounds with the associate director of the Harvard Services. The assistant resident said he preferred to stay. Now he asked the interns if they were going to the morning conference. They said they wanted to stay. He said: "There's a cardiac conference going on now and you're a half hour late." The interns left the room reluctantly, but did not go directly to the conference. They stopped at

> patients' beds, in the laboratory, or at the nurses station. When a laboratory technician stopped the intern I was with and asked, "Are you very busy now?" he shook his head. "Do you need some blood?" he asked. She said, "I do, on Mr. Jones, but if you're busy I can come back later." He said, "I'm not too busy, but I was on my way to a conference. I drew some blood this morning. Will that do?" The technician said it would not, so he went to draw some more blood. As he was going, he turned to me and said, "I'd rather go for coffee, but I guess I'll go over to the conference. I'll only be a minute, so wait for me and I'll walk over with you."[18]

When the senior resident told the assistant to strip the team, I thought he was trying to get some of us out of the room. This, however, was not the case. He wanted everyone who possibly could to go to the conference. A similar incident occurred the next day.

> The patient who required emergency care yesterday was being presented to the visiting physician. Kingston explained what had happened during the emergency, then admitted he did not know why it happened. The interns were discussing this with the visiting physician when the senior resident walked into the room, saying, "I hate to interrupt, but the chief resident says there's a conference on cancer of the breast to which you are all invited. It's going on now. We are all urged to attend." The interns continued to discuss the patient. After a few minutes, the senior resident said: "Why don't those who are caring for this patient stay and discuss him with the visiting physician, but the rest of us go over to the conference?" He turned to walk away, but stopped and said to the visiting physician: "I want him /_pointing to Kingston_/ to get as much

> out of you as possible. Naturally, your opinions are important and we want them." Then he left the room. I went after him and asked: "Why urge the interns to attend this conference?" He said: "I think those who are taking care of the patient should stay, because no matter how many books you read or how many conferences you attend, what they will remember is the patients they are caring for. I think that this is the heart of teaching, but the conference is with a new man who is joining the staff, and this is a good way to introduce him. This is the best time to have the conference, noon on Friday. It's just that the conference cuts into what they want to do. They knew about it. They had a notice about a week ago." Most of the interns followed us over to the conference.[19]

Incidents like these made me aware of the gradual change in the interns' perspective. Whereas they had at first made every effort to attend scheduled conferences, often knowing they would only have to return later to finish their work, they now chose to remain with their patients whenever there was a timing conflict. Other, more subtle, changes also emerged.

One of these was in their reading habits. All interns who were questioned before coming to the hospital said they expected to do a great deal of reading. Many stressed the importance of keeping up with the professional literature. Once on the job, however, interns find little time for reading.

> We were in the lab, sitting and talking. I asked Harper /̲ intern /̲ "How busy have you

> been?" Harper; "I've only had one admission since I've been here. I've been lucky. I haven't been as busy as the others. I still don't know what's what. Just learning where things are and how to get them takes awhile." Harper had said before coming to the hospital that he thought he would have time to read and that it was absolutely necessary for him to do so. I asked about his reading, and he said, "I may have time later on. It's like everything else, you make time for it. The work I have to do is something I only thought I knew about. I knew I had to work hard, but I didn't know what hard was. I just had no idea. I keep thinking to myself, I know there's a routine here somewhere, and once I learn it, everything will be okay." 20

Interns read when they can. Although they try to read everything pertinent to their patient's problems, they do not think it possible to read just to keep up with the medical literature. They find this out quickly, after a week or so.

> English told me he was depressed because he didn't have time to do everything he had to. I retorted laughingly saying, "That's responsibility". He then added, "But not this much. There you are, and you have to know how and what to do." When I asked what he had been doing, he aaid, "I spend most of my time running around... You don't really know what it is to have responsibility. I didn't think these things would take so much time. Everything we do takes a lot of time. It takes all day to get your work done. I don't even have time to read." (He had expected to read a lot during the year.) "I didn't expect to have to do all this running around. I didn't think I'd have to spend so much time doing lab work, dressings, and all that. I just didn't expect this. I didn't realize that this is what our responsibility would be for. When you think of patient care, it's not in terms of these things. Yes, I thought I'd have time to keep up with the literature. Forget it. It's not possible when you have all these other things to do. Now I have to depend on others." 21

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When the interns found it impossible to maintain a high level of academic effort and still do all they had to for their patients they called into question the very idea of responsibility. "We are responsible for our patients," they began to say, "and maybe that's all we should be responsible for".

Interns could simply redefine responsibility to exclude everything not directly related to patient care thus implying they consider academic activities less important. This would logically lead, however, to defining the internship as nothing more than a lot of hard work to be endured in order to earn certification. While this may actually be so, interns cannot accept such a definition of their situation. To do so would be to acknowledge that learning is less important than work, and, to deny the educational benefit of serving the internship. Interns think of medicine as a body of knowledge they must learn. Their efforts, they believe, must be directed as much toward learning as toward doing their work. Thus, a perspective that does not view the internship as a learning situation is of no use to them.

Faced with the problem of reconsiling the conflicting demands of learning and of work, interns do reduce their participation in formal learning activities. But these are exactly the activities that justify the internship as a learning experience. Since the value they place on the internship lies in the interrelation of learning and work, interns must evolve a perspective that permits them to redirect their efforts without subverting that relationship. Hence they must establish the educational value of the work they decide has to come first. This they accomplished by introducing aspects of learning into their work. The work itself assumes meaning in terms of its learning potential.

> "At first you say, 'Boy, I'm not going to be able to handle all this.' My own ignorance was frustrating at the beginning. All the frustrations that are a part of any internship also get you down. You know, you can't get an x-ray when you need it, or you can't find a chart, or they are all out of this or that when you need it, or they have'nt got a drug you need, or the nurses aren't around. All that is frustrating. And you thought what you were going to be doing would all be important, so you tried to do it all. I think it kind of dawns on you gradually that all of it *isn't* important, just because you have responsibility for it. It's the learning of the realities of medicine. What's good is that you are sort of on your own, but the internship is so full and busy that there are really few dramatic times. Soon you realize that a lot of what you're doing doesn't have to be done. Not everything you do gives you experience. When you do your work you just get exposed to all kinds of problems. You get a tremendous amount of experience that way. I can't really point to any specific experiences. but an internship is just a whole lot of little experiences with patients by which you gain confidence. If you can do all your work here you just have to believe that you can take care of patients anywhere." 22

To rationalize the shift in focus from formal study to patient care, interns invoke another idea common in medical education-, the idea of clinical experience. "There are two ways of learning." they say, "from books and by seeing things for yourself." Work with patients, then, offers the second type of learning. Thus interns legitimize their choice of a level ("you can't do it all") and a direction ("just take care of your patients first; that's the ticket") by stressing the value of clinical experience.

> Dearborn had told me when he first came on the wards that the internship was just now a lot of hard work, " a lot of crap that somebody has to do." He said, "I'm enjoying myself. I don't try to do everything, like I did at first. I used to do everything I was told to do, but now I know what I have to do and what I can do without, because I don't get anything out of it." "What," I asked, "do you want out of what you're doing?" "I want as much experience as I can get. Next year (as an assistant resident) I'll have time to read and get some depth, but now I'm getting a lot of experience." Trying to be funny, I said: "Working less, but enjoying it more." He shook his head and said: "Hell no. I'm working my ass off, but I am learning a lot of medicine." 23

When interns incorporate the idea of clinical experience, they begin to weigh the value of various activities in terms of the experience they provide.

> At visiting rounds the medical student presented a patient described as hypertensive, dehydrated, and in acidosis. The student summarized the admission data and gave the course of his hospital stay. I asked Land what he thought about the patient. "Well, the results of the (lab) tests are contradictory. It's hard to know what to make of them. I don't know what I think." There was a great deal of discussion about the patient among the visiting physician, interns, and medical students. Ricks, an intern who had just come on the ward from a tour in the out-patient department, asked: "Is this a hypothermal case?" Tucker, the intern responsible for the patient, said: "Doctor Ricks knows of a reference in the literature about hypothermal cases." "I've had some time to read. In the December Lancet there was a study." He reported what he had read.

> Another intern said: "I saw three of these cases when I was a student here, and they all died." Land said: "These cases aren't rare. There's another one around. I saw one last month too." "Let's take a look at the patient," said the visiting physician. We went along while Tucker examined his patient. The visiting physician suggested he continue treating the patient as he had been, and visiting rounds. Land said: "I think the rounds were good today. There was a lot to get excited about. It was an important case." "What," I asked, "makes this an important case?" He told me it was important because it was not typical. "He's sick, and we have other people who have some of the problems he has, but you rarely see anyone with so many problems. You have to control all of his systems. You're keeping him alive..." Ricks, who was next to us, said: "You have to use your head on this one. There are so many things that could be wrong. You've got to think of all of them. It's like doing detective work, a great experience." Land said to me: "that's right. Today was good, because the case gives you experience in diagnosis. You have a lot to do, but you think it over, talk about it, and learn a lot."[24]

Later that morning I asked the assistant resident why he had selected that particular patient to present to the visiting physician. He answered:

> "It's really a typical case, but more important, it offered an opportunity for learning, a chance for the intern to do a lot of different things. This patient makes a variety of demands on your skills and gives you a lot of experience you wouldn't otherwise get." 25

At lunch, I talked to the senior resident about the case:

> "What," I asked, "made today's case so important?" "There are a number of reasons, " he said, "why it's an important case and why the interns get excited about it. This is a very sick patient, but we can do something for him. He also presents a wider range of problems, more of a challenge. It's just not routine patient care. He (the intern in charge) will remember this case, and the others will remember what they talked about. It's the involvement that's

> important. If they have to read, they will read, but otherwise you won't make the time to read. You're too busy taking care fo your patients. This case offered Tucker a good opportunity to practice, to get experience. But Ricks, the intern who talked about the article on hypothermal damage, has a bookish approach to medicine. He had theory emphasized when he was a student, and he is carrying on the same way, or using the same approach here. Others are not like that. The others are more, I guess, learning by doing or applying what they learned." Brown (intern), who had joined us at the table, said: "I think it was a very good visit. I learned today more about electrolytes than I thought I would ever know." The senior resident turned to me and said: "You see, if he read it, he might not remember it, but when he learns it in terms of a patient he will remember it." 26

Interns, residents, and students all agree that the "more valuable" activities are those that offer broad experience. Visiting rounds are considered "good" when they center on patients with a variety of problems, and an "important case" is one that demands the doing of a variety of things. Activities of this sort, interns say, are "more valuable" than "book learning" or attending scheduled academic activity.

> "I've missed lots of conferences. I think I don't get too much out of the conference and get a lot more out of sitting by my patients and watching them, taking a pulse, or reading about a patient's disease. I'll learn a lot more that way. The thing is, who am I working for? I'm working for myself, that's who." 27

Interns also use the idea of experience to excuse their not reading the medical literature unless it pertains to the diseases of their patients.

> Wicker (intern) said, "It's important to read". "Read everytime you have an opportunity to, but if I took time to do a lot of reading, I probably would not have had the experience I have had. It would not have been enough to just read. To be a good doctor, I had to get the experience I did get. If I did take time to read, I wouldn't be doing my work. I read when it has something to do with my patients." 28

The demands of routine work, however, make it impossible for interns to limit their efforts only to the "more valuable" activities even when an intern has an interesting case, his day-to-day work must still be his primary concern.

> I met Benson on the ward, changing a dressing. When I asked him what he thought of visiting rounds that day, he said,"I'm interested in metabolic probelms, so this was a good day for me. We had to worry about the patient's metabolic state all the time. There are a whole range of things you could do for this guy, and you have to pick out the ones to do. I think that this is what makes this case interesting. I also don't have to do the running around on this case. I could just sit back and listen and talk about the case. When you have to run around, you're caught up in the routine. You don't have the time to appreciate what's going on. You're so worried about treating the guy, you don't realize you are learning until later. This way, I can keep looking in on the guy, but Tucker has the responsibility." 29

Interns want medical responsibility for an important case. They value highly the experience such responsibility gives them. But they no longer want the kind of total responsibility they initially accepted. "Who needs it?" an intern told me, "running around doing all those things doesn't add anything to what you already know, but taking care of a sick patient is a valuable experience." They will tell you, as Benson told me. that you have to get your work done, but the real learning comes in diagnosing and treating your patients. Though they are still concerned with the work they have to do, they no loner think all of it is valuable. The potential for clinical experience is the criterion on which they base their value judgments. Discussing an "impotant case", for example, they consider educationally valuable because it does result in clinical experience even for those who have no responsibility for the routine work. When interns talk about these matters, it is obvious that they distinguish between responsibility as they first defined it and the more traditional idea of medical responsibility.

Interns continue to work at a high level, though they no longer consider everything they do important for learning. That is, they still do all the things that have to be done for their patients. Several things supply the impetus for this continued level of effort. First, the men do not want to perform poorly. They want to do at least as well as the other interns. Therefore, they try to do as much of their own work as possible. Second, they do accept the idea that medical responsibility includes an obligation to do for their patients anything that would not otherwise be done. The simple fact that there are not enough nurses on the wards requires the interns to work harder. Finally. their daily contact with residents encourages them to do as much of their work as they possibly can. Although they no longer want the sort of responsibility they initially envisioned, they do want medical responsibility as it is traditionally defined. They do not want to relinquish to residents the responsibility for patient care. Interns realize that residents have the power to usurp their authority and the means to assure that necessary work will be done. Thus the resident has a great deal to do with the interns maintaining a high level of effort.

If interns admitted, however, that they were socially coerced to work at a high pitch; they would be denying the purpose of an internship that is. they would be conceding that their efforts were not to further their own educational goals, but only to please a superior. Again. they need a rationale to justify their working hard at things that are not, in their opinion, meaningful in terms of learning medicine.

Much as they used the idea of clinical experience to justify directing their effort toward patient care, they use the same idea to justify trying to do everything their patients need.

> We were in the laboratory. "This is the best slide I've ever seen." said Paretti (intern). Moore (assistant resident) walked over and looked at the slide, asking:"What do you make of this?" "I don't know," said Paretti. "I think it's going to be difficult to diagnose." Moore said he didn't think it was pneumococcal pneumonia. "Yea," said Paretti, "well. you don't mind if I go ahead and treat him for pneumonia do you?" Moore laughed and asked: "You don't believe me? I told you he doesn't have pneumonia."

> Paretti moaned, turned to me and said: "Such is the life of an intern. You can't even trust your assistant resident. If that's not pneumococcal pneumonia, I'll eat this slide. When I was at medical school I bet I didn't see tow cases of pneumococcal pneumonia. Here, I can't remember how many I have seen." "Yes. said Moore, "amd you know what? No matter how many you see. you learn from each one. Each one of them has something interesting about him. They're all a little bit different. You (turning to me) know it's true." "It's not onky that", said Paretti, "the patient may be a little different or the course of the disease may not be the same, but everybody also brings something a little different to the case. Even if you wanted to look at each case the same way, you have to listen to other people who are looking at it differently. That's what makes each patient an interesting case. and you learn something from every one of them. As long as you realize every case is different. you learn from each case. Each case is an experience in itself." Moore, laughing. said: "An old friend of mine used to say 'beware of the man who has seen a case' and then he would say. 'I've seen a case of...' When someone is talking to you about a patient of yours, and he says 'I've seen a case of that. 'beware'. I guess what I mean is that when you've seen a case you tend to treat what you think about it, rather than, treat it as a particular set of circumstances that you have to manage." Paretti said: "If you've seen a case. you might take it for granted, and not do everything you should for that particular patient." [30]

Interns often expressed the opinion that each case has some potential clinical experience, since each case has its unique course and consequences. Talk like Moore's and Paretti's also permits the resident to tell the intern that he must do everything for each and every patient, no matter how many times he has seen a case like the one he has admitted on the ward. "A good intern", an assistant resident told me, "is willing to approach a patient enthusiastically no matter how many times he has seen, for example, a stroke, when he gets another stroke, he doesn't just sulk, but goes ahead and does his work." On the matter of patient care, the interns operating perspective does not conflict with the expectations of assistant residents:

> I think after awhile it becomes difficult to say what you learn. but you do learn from each patient, if you pay attention to the patient. I think that each time you see one more case of something, you learn a little more, nothing specific but something that will make you more confident. You probably know a lot after the first time you see it. but. new problems always come up. and you learn. That's why you have to approach each patient as a new experience. You know what you have to do, so you do it. but you are alwys looking for the idiosyncrasy you didn't see before. You may not have paid much attention to the little things the first few times you saw a certain kind of case because you were worrying about the big things. Even if it looks just like another case, you can get more experience by doing your best for that patient. Well. maybe it is discouraging to have a lot of the same kinds of problems, but there is still a lot to be learned from every patient, and you just do your best for them all.[31]

Many **incidents** and conversations recorded in my notes illustrate the importance interns place on **patient care**. These **observations** yield a picture of an **operating** perspective organized around the **idea of clinical experience**:

(1) An intern cannot do everything that logically falls within his responsibility.

(2) Since the work directly related to the problems of patients provides desirable clinical experience. an intern should direct his effort toward providing patient care.

(3) An intern has medical responsibility for his patients, but must also accept som e responsibility for other kinds of work related to their welfare.

(4) An intern can make the time he needs to perform adequately at (2) and (3) by reducing the effort he expends on academic activity.

THE CONGRUENCE OF PERSPECTIVE AND HOSPITAL PURPOSE

Although in discussing involving perspectives I have treated responsibility and experience as distinct, discrete ideas, they are not mutually exclusive. That is. the emphasis on the idea of responsibility does not ban consideration of the idea of clinical experience in the initial perspective. Obviously, the reverse is also true. The idea of responsibility is an integral part of the operating perspective, despite its focus on clinical experience. Interns attempting to determine the relative value of the activities have recourse to these two ideas and use them to organize a way of thinking and acting at the hospital.

Given responsibility for the first time, they made maximum use of that idea in deciding what and how much they should do. The result was a perspective that set a goal of doing everything. This initial perspective led them to believe that everything they did was somehow important: the idea of responsibility colored their judgment of every element of their immediate situation.

The reality of their work soon called into question the intern's definition of responsibility. There was, they came to think, such a thing as too much responsibility. At his point they had to find some other criteron for judging the value of their activities. Without denying responsibility. they concluded, that a perspective organized primarily around it did not allow them to set a realistic level of effort and did not tell them where to direct their energies.

Interns must operate in the hospital, an institution organized for the purpose of providing services to patients. Thus they come to see patient care as their primary responsibility. The intership is supposedly a time of learning, particularly at a university or university-affiliated hospital. But to attend to their patients adequately, interns must divert some of their effort from academic pursuats. A perspective emphasizing the idea of clinical experience enables them to coordinate work with learning, and legitimize their destiny their efforts chiefly to care of the sick. It solves the problem of deciding what their level of effort should be ("get all the experience you can") and where that effort should be directed ("just take care of your patients").

The implications of the ideas around which perspectives are organized are important in terms of their effects on the direction of interns' efforts. If the initial perspective persisted, interns would divide their efforts between patient care and academic activity. The operating perspective is eminently more practical. Furthermore, it reduces the potential conflict between what interns want to do and what hospitals are in business to do. The operating perspective I have described is a way of thinking and acting that does not conflict with the purpose of a hospital.

Interns come to define their situation and set themselves goals that make them valuable members of the medical labor force, without which the hospital could not stay in business. No matter how much interns complain, they do come to value exactly those activities that they have to do. If they did not, they would not be amenable to being used as they are in the hospital's division of labor.

Intyrn's eventual choice of perspective is not simply fortuitous. The people with whom they must work present and interpret the ideas of responsibility and experience. The prevailing practices and existing social norms preclude any other choice. By providing information from the medical literature, for example. the residents dicourage intern's expending too much effort in reading by themselves. Assistant residents permit them to miss many conferences and lectures, thus indicating that patients are more important than academic activity. Paradoxical as it may seem. senior residents tolerate such action while taking steps to assure that interns will attend some conferences and lectures, "because no matter how many books you read, or how many conferences you attend, what you will remember is the patients you are caring for." The unofficial norms for intern's work support the prevailing practice of directing effort toward patient care. The fact that missing a conference is tolerated explains why interns choose to do so; that is, there is no social norm prohibiting it.

There are,however. norms that prohibit reduction in effort expended on patient care. Failure to conform to these norms have consequences. If an intern does not do what he has to do for patients, it becomes obvious during work rounds Since all interns know they are expected to have their work done, they do it. Many consider the failure to do everything necessary for a patient the most serious charge that could be made against an intern.

Only one of the interns I observed frequently violated this norm, and his behavior had a number of social consequences. First, he was the most unpopular intern. He had only a few friends, and these were interns on the other service, interns who did not have to work for him. His associates maintained their social distance, just short of ostracism. Second, he was not offered much help through which sanctions were applied to enforce the norm for work:

> The assistant resident was on his way to the ward to see Clark. He asked Benson [intern], "How come you're not helping Clark? I thought that was your patient. How come you gave Clark such a good patient?" Benson said,"Well, he just wanted him so I gave it to him. I hope they take to each other. There's a lot to do." The assistant resident said, "They've taken to each other. Clark is down there on the ward now working his ass off." Benson nodded, turned to me and asked, "Do you want to walk over to x-ray with me?" When we returned we went to the ward where we met some visitors. Benson told them that Clark would talk with them. I asked if they were relatives of the patient Clark was working on. He said, "Yes, he's pretty sick. I don't know what Clark can do for him but Clark is going to spend a lot of time trying. I'm not a scut man, but I do expect interns to do most things that should be done, as they should on each and every job." [The implication was that Clark did not always do things as they should be done, and Benson did not offer Clark any help, though we were on the ward.][32]

Since interns were encouraged to help one another, I didn't at first understand the assistant resident's tolerating Benson's implicit refusal to help Clark. When such behavior is a sanction for the enforcement of the norm, however, assistant residents apparently allow it. I observed only a few such incidents. Most interns do their work, though they did not want to be considered scut men who did or expected always to be done as it should. The existence of such a norm and the possibility of sanctions most certainly was an impetus for interns to expend their efforts on patient care.

In caring for patients, interns set a high level of effort. Their overall level, however, was less than that one would expect those in authority wanted. That is, they reduced considerably their participation in academic activity. Studies of other workers have described the pehnomenon in which workers set production quotas lower than those expected by management. Sociologists would all agree that such quotas are the result of interaction among the workers. At the Boston City Hospital the level of overall effort (quota) was, in fact, determined by interns, but management (assistant residents and residents) not only tolerated but possibly encouraged a lower level. While maintaining high expectations for patient care, they accepted tacitly, even condoned, neglect of academic activity. In this case, management apparently did not want maximum effort. The level of effort was less important than its direction.

A maximum effort could be incapacitating to interns, which would reduce their value as a part of the hospital's labor force.

Effort expended on academic activity would certainly reduce the effort directed to patient care. The level and direction of effort interns finally adopt coincides with the hospitals function as a service facility rather than an educational institution. Interns coordination of their learning and work activities is exactly what is necessary to maintain the hospital as a viable social organization.

FOOTNOTES

1. Intern, First Week: June 29, 1965
2. Intern, Second Week: July 1, 1965
3. Intern, Second Week: July 5, 1965
4. Intern, Second Week: July 5, 1965
5. Intern, Third Week: July 8, 1965
6. Intern, Second Week, July 5, 1965
7. Intern, May 19, 1965
8. Intern, July 27, 1964
9. Intern, July 31, 1964
10. Intern, August 4, 1964
11. Intern, August 19, 1964
12. Memorandum explaining the research that I and other social scientists were doing at the hospital; August 20, 1964
13. Intern, August 9, 1964
14. Intern, August 9, 1964
15. Intern, September 9, 1964
16. Intern, September 9, 1964

17 Intern, September 9, 1964

18 Intern, August 20, 1964

19. Intern, August 21, 1964
20. Intern, July 1, 1965

21 Intern, July 5, 1965

22. Intern April 19, 1965
23. Intern, November 20, 1964
24. Intern, August 24, 1964
25. Intern, August 24, 1964

26. Intern, August 24, 1964
27. Intern, December 23, 1964
28. Intern, June 11, 1965
29. Intern, August 24, 1964
30. Intern, April 7, 1965
31. Intern, June 2, 1965
32. Intern, April 7, 1965

CHAPTER 8

EXCHANGE RELATIONSHIPS AND HOSPITAL ORGANIZATION

Social relationships may be conceived as processes by which people negotiate the exchange of information, goods, or services. The process of exchange may be briefly defined as the obligation incurred by a recipient of valuable matter to reciprocate,when the occasion arises, by furnishing his benefactor with matter of equal value. A relationship of this sort begins when one person benefits by the acts of another and reciprocates adequately, thus inducing the other person to continue the relationship under conditions that are mutually satisfactory. The relationship is a product of the beneficial and reciprocal actions of two or more people. It will persist as long as the people involved are more or less equally rewarded.

The relationship between interns and medical students is an example of social exchange. Students anxious for experience and responsibility were permitted to take the role of intern in exchange for information interns had to have if they were to do their work. When interns got the information they needed, they had little to gain by permitting students to usurp their privileges and prerogatives. Thus, the conditions of the relationship changed as students lost their negotiating currency.

Interns are involved in several sets of exchange relationships. When they begin their year at the hospital, they have little, if any, idea what is actually expected of them.

They are not told the rules, nor how they are to work with other people. Since they must work together with people, they evolve, through social exchange, a network of relationships that serves as a rudimentary social structure.[1] Social structure, in these terms, is a network of relationships made up, in turn, of social exchanges.[2] The social structure of the services of the Harvard Medical Unit grew out of exchanges between interns and the people with whom they had to work - other interns and residents, physicians, nurses, and ancillary hospital personnel. These groups of people who came together negotiated relationships that facilitated their work. The relationships between interns and students were not so much prescribed by the hospital's normative patterns as they were negotiated by the participants. Each year interns must negotiate mutually satisfactory relationships of this sort with a variety of people. These relationships are not idiosyncratic but consistent patterns that become characteristic of the Harvard Medical Unit at the Boston City Hospital.[3]

Social Exchange and Negotiated Learning

Interns on the Harvard Medical Services work in the shadow of the Thorndike Medical Laboratory, whose staff includes many distinguished medical scientists. Many other physicians are studying specialties or working on research projects at BCH. There can be no doubt that these physicians constitute an enviable pool of expert opinion in almost every field of medicine. Working with men of their caliber is considered to be one of the benefits of a university internship. It is essential to realize, however, that the work of interns and the interests of medical scientists and specialists sometimes conflict. The patients interns must care for are not always interesting to other physicians. The interns have much to gain by drawing on the knowledge of these physicians, but teaching and consulting offer few rewards to scientists and specialists. They have their own work to do, and tend to resist other demands on their time. This is not to say that the Harvard physicians do not do any teaching or consulting, but they do limit these activities and try to make the situations more satisfying to themselves.

The Harvard physicians teach because they take pride in training the young men who will become their colleagues and eventually their successors. "Not everyone," one of them remarked, "has the chance to shape the men who will be practicing medicine." Those who provide information when it is needed also earn the regard of interns. "It's a good feeling to have (interns) look up to you for advice," another physician said. But these rewards are not always payment enough for the time and effort that teaching and consulting require. "Sure you have an impact as a teacher, and you want to help as much as you can, but you can't get your work done that way." Most physicians try to increase their compensation by making additional demands. Most obviously, they insist on dealing with problems of some interest to them as well as of benefit to interns. In these circumstances interns can expect Harvard physicians to teach and may further claim their assistance, but they must respond to the demands established as payment for the time and effort expended in their behalf. This means that they must negotiate their relationships with teachers and consultants. Thus they have to determine what they have to exchange in return for the information and assistance they want. Interns distinguish among the kinds of Harvard physicians they encounter. They consider visiting physicians different from consulting physicians. As one explained:

> The visiting physicians should be a man with a lot of practical experience who can help you in a very real way. He should say things with the kind of confidence that can come from practicing on your own for a long time. I want the benefit of that kind of experience. He doesn't have to be a superspecialist with all the answers. The consulting physicians have all the answers because they're the smart young men of medicine. They want to do this test or they want to do that test, but the visit should say, "The patient is 92 years old; send him to a nursing home."

I asked, "Would it be fair to say that you are looking for information from both the visit and the consult, but different kinds of information?"

> Yes. Here's a good example: We've had a lot of lung disease. We have Dr. Cohn, who is an internist; his specialty is pulmonary disease. We also have an infectious disease consult, Dr. Goode. Together, they have what I want. Cohn is smart, but his attitude is one of the New England doctor sitting back and looking over the patient. Goode, on the other hand, is a good consult, because he is interested in finding the organism responsible and treating it with the right sort of antibiotics. Cohn is the sort of man who can go up to the bedside and examine the patient, making a diagnosis in a homely sort of way. He doesn;t know that much about the various organisms but he can tell you a lot about how people get lung abscesses, what kind of abscesses he has seen, how he has treated lung abscesses, and so on. He can also tell you what you can expect to see in a day or a week with a patient like that because he has seen what has happened to other patients. The infectious disease man doesn't tell you those things. He tells you to treat it with acromycin, and it does

> work, but you want to know more than that. If you put a visit and a consult together, they both can teach you something about managing a patient. What you have to do is to take the visit and make him into what you want him to be. The consult is pretty much what he is, and you have to take him as he is.

The Visiting Physicians

Interns agree that they do not get much assistance from visiting physicians. The latter have little to say about patient care, though they are interesting for other reasons:

> Let's face it, they have little to do with what goes on. They don't help us with the practical management, or with immediate problems. What they have to say is rarely pertinent to what you are doing, though they are interesting. They are most interesting when they reminisce about the cases they've had, or when they discuss the literature. They have been good for me, but not because of their help with patients. I think they're good because it has been interesting to hear about the patients they've had, or to learn about the various approaches to patients, medicine, medical education and so forth. They are like nice current history books.[4]

All visiting physicians, however, are not so helpful. Interns must be careful how they manage them if their visits are to be useful:

> The visit today was Dr. Jerome Smith (intern) was presenting the patient; Calvin (student) was holding the x-rays. When Smith finished his presentation, Jerome asked: "Well, what's the problem?" Smith looked around, smiled at the resident, Keller, who said to Jerome, "The x-rays are interesting and might be of help." Jerome pointed to an x-ray, holding it up to the window, then made some comment about heart enlargement. The resident nodded. Jerome turned to Smith and said, "I agree. It's acute congestive heart failure." There was silence. The resident asked Jerome what he thought of trachea punctures with saline solutions. Jerome said, "I'm for it. It's fine if we had someone to do it. I'm in favor of it, but not by everyone and everybody." More silence. Smith said, "To get away from the subject, is there any explanation for this patient's remitted asthma?" "The only thing we know is if it doesn't remit, the asthmatic dies," Jerome said. There was laughter. The rounds gragged. I had

> the feeling that the patient wasn't exactly an exciting one and that the interns, assisted by the residents who asked questions were trying to kill time. Jerome had looked at his watch a number of times, but now, 30 minutes before the end of rounds he looked at it, nodded and started to get up. No one said a word. A senior resident said, "Thank you, Dr. Jerome. We appreciate your coming." Jerome nodded and left. After he left, Smith asked the assistant resident why he wanted that patient presented to Dr. Jerome. The intern and residents laughed. The assistant resident asked, "Who did we have that was better?"[5]

Presented with a patient whose problem was obvious, Dr. Jerome could add little to what the interns already knew. He could not reminisce nor discuss the medical literature because the patient had no viral infection, his own specialty. Since there was nothing he could say, he brought his teaching to an end. Visiting rounds of this sort happen most often during the first month or so, before the interns learn how to manage a visit, that is, before they know the conditions of their relationships with visits and how they must handle them to create a teaching situation.

All visiting physicians are, of course, willing to teach. Most do not, however, know what they will teach until they are actually presented with patients. When a visiting physician sees a patient with problems relevant to his particular experience, he can help make the diagnosis, or he can add to what interns know by drawing on his own special knowledge. Patients with obvious problems or problems not related to his specialty do not lend themselves to teaching. Sometimes, in order to find an interesting case, a visiting physician may make a round of the ward to see for himself what patients are available.

> I arrived on the ward a few minutes after visiting rounds began and found the group making walking rounds of the patients. I asked Hertman, an intern, who decided to do this. He said, "Rand (visit) hasn't seen all the patients for a while, so he wanted to make rounds." The interns looked anything but interested in what was going on. Landfeld (intern) would, for example, look at me and hold his arm straight out with palms up, rolling his eyes up into his head and shrug-ing his shoulders. Hertman was carrying patient charts with him and reading them as the visit examined patients. The students and the assistant resident were discussing the patients with the visiting physician. The interns, standing off to the back of the group, had nothing to say. I asked Landfeld, "Why see the patients?" He replied, "We didn't have anyone to present so Rand wants to know exactly what kind of patients are on the ward. He's using walking rounds as a chance to find some problems he can talk about."[6]

Many visiting physicians will not make the effort to find patients for themselves. Most are on the wards for only a few hours each week when they have to teach. A visit cannot know all the patients and cannot choose the ones with problems that lend themselves to teaching. Even those who do look for patients can do so only occasionally. But the visit must always have patients with problems related to his specialty, or his position as a teacher will be untenable. The assistant resident and the interns have the continuing responsibility to find and present suitable patients to him.

> The assistant resident, Goldsen, walked into the laboratory and asked Williams, a student, if he had admitted any new patients. Williams said, "No, not today but I had two that died yesterday." Goldsen nodded and said, "That'll have to do." Williams asked, "How about that woman that died? Couldn't we do something with her?" "Well,"said Goldsen, "she's interesting but I don't know if Kenner, a visiting physician, is up on her problems. But why don;t you present her first?" Williams said, "I don't know. I think that Benson should present her first because mine is really only a comment and won't give him much to talk about." Goldsen said, "That's okay, because after

> you present, we will have to go down to the ward and see Benson's patient. So why don't you present first and we won't have to come back up?" Williams agreed. When Warren, an intern, came in, Goldsen told him that they would present the woman who died. "Why?" asked Warren, "she died. I am tired of hearing about cardiology. All month long I've heard about cardiology." Goldsen shrugged. I asked what was wrong with cardiology. Warren said, "These damn visits know only their specialty. We're supposed to become rounded physicians, but these guys don;t know anything beyond their specialty. How are you going to become a rounded physician? I'm not kidding. I'm tired of these guys and how we have to handle them." Goldsen shrugged again and said, "Kenner isn't that bad. He's really pretty good, and I think this patient might make for an interesting session."[7]

The patients selected were both suitable for teaching. The dead woman presented problems relevant to the visit's specialty, and the new admission would require a complete presentation of the history, physical examination and laboratory results.

Since students usually present patients, arranging a successful presentation of a suitable patient requires their collaboration. Interns teach students how they should present patients so as to set the stage for teaching.

The visiting physicians know all about this process. They often make some reference to reveal that they are aware of how patients are selected and presented for their benefit.

> A male admitted with a suspected myiocardial infarct was presented by Burke, an intern, to Tower, a visiting physician. When Burke finished, Tower asked for a diagnosis. Burke said, "Infarct." The assistant resident then explained, "We frequently get cases with chest pains, negative lab results and spurious symptoms. Are there any particular clues to watch for?" Tower, smilingly replied, "You're not asking a very well-informed source." No one asked another question about diagnosis. Lynd, an intern, asked, "Do you have any strong opinions on the treatment of infarcts?" "I have no strong opinions," Tower answered, "I always listen to the house staff." Smilingly he added, "Why don't we just go on to what we can talk about?"[8]

The rules of this game are simple. First, residents, interns and students must agree to accept what the visit defines as the content of his teaching. That is, they must talk about something he knows about. Second, questions must be relevant to the visit's interests, experience, or knowledge. Finally, the visit must be left with something to say. Thus, the intern on July 27, 1964 did not make known his diagnosis or tell the visit the results of the neurological consultation. If he had, the visit would have had nothing to say.

If they play the game properly, interns are rewarded with instruction. If they don't they get little or none. When all concerned abide by the rules, the relationship is satisfactory to all.

The conditions of the exchange between interns and visiting physicians appear to cost the interns very little. In exchange for selecting and presenting suitable patients, they gain teaching performances by distinguished scientists and knowledgeable physicians. They don't however, get off absolutely free. The most obvious additional cost is that they must make an hour and a half in a busy schedule for visiting rounds. This often takes them away from their patients and leaves them with less time to do their work, but the problem is not insoluable:

> A medical student was presenting a 65 year old male with rheumatoid arthritis and a fever of unknown origin. I did not see either Lynd (intern) or Dickson (student) at rounds, so I went looking for them. They were working on a patient. Lynd was saying as I entered the patient's cubicle, "Your job is to take care of the patient first. There's no reason why, when you have a patient this sick, you should make visiting rounds. Your responsibility is

> to the patients." I would have thought that this was said for my benefit but he had said the same thing earlier in the presence of the assistant resident, other interns and students. When the assistant resident told them that rounds would start promptly at 10:30, Dickson had said, "I'm not quite finished with my new admission." Lynd had said, "Well, if you can't finish in time, you'll just have to miss the visit. Patients come first, and you have a couple of acute problems on the ward. It's more important to them than to make visiting rounds."[9]

Interns expect visiting physicians to understand that they have a great deal of work to do. Obviously they are not required to attend visiting rounds when they have critical patients to care for or when there is a medical emergency. More than that, however, they expect the visit to tolerate their being late or leaving early.

> The visit (Tower) was waiting for the house staff to begin rounds. Rosenberg (intern) said to me, "In case you're wondering why I'm always late for visiting rounds, it's because I'm getting my work done." I knew he had been introducing sodium chloride into an intravenous set-up. "I'm late," he said, "and I'm sure the visit thinks I'm terrible but he knows I have to do my work. These guys know it's not easy to get there on time. When you have so much to do, you can't sit here and listen to everything he has to say. An hour and a half is enough. That's all the time they are supposed to get and they can't ask for more. The visits have to be flexible or I won't come at all."[10]

Loss of time is not so annoying to interns as another price they must pay for the teaching they receive on visiting rounds. Since each particular specialist makes visiting rounds for a month, this means that all month they discuss the same, or similar, kinds of medical problems. Thus rounds with a particular visit can be very much the same for 20 days or so.

> The other day on rounds with Walters (visit), I came to the conclusion he was a dirty young man. We are on female medicine, and with each patient he says, "How's the cardiac situation?" Then he goes on to listen to the heart and do a thorough chest examination. He does that every day. I thought he was getting some kicks that way. I asked an intern if it wasn't unusual to do chest exams on every female patient. He answered, "Walters is in the heart station, and this is his specialty." A student who was standing nearby asked me if I had made rounds with Tower last month, then asked how many times Tower mentioned a specific medical problem. I had counted at least a dozen times in one day. The student said, "That's his specialty, and he stays with it day after day, so it gets to be a lot of the same each day. Walters is a chest man, so for this month we see a lot of what interests him day after day."[11]

Interns think that because they select the patients they have control over what will be discussed. Many times I heard, "You maneuver a visit to a problem that interests you and let him talk it up." In fact, visits resist such maneuvers by refusing to talk about problems outside their specialties.

> When the visit asked for a diagnosis, the intern said, "My diagnosis is leukemia and urinary tract infection, but I'm waiting for the results of some lab work before making a definitive diagnosis." The visit (Manners) asked, "What do you think is the important problem?" The intern, Reed, said, "We would like to prove a diagnosis of malabsorption." Manners nodded. The assistant resident (Madge) asked, "What about arithrode leukemia?" Landfeld asked, "What is it?" Manners looked around the table. He was on the edge of his chair. He asked Madge, "Why don't you tell him?" Madge gave some explanation. Landfel asked, "How come you don't hear about it?" Manners said, "It's not that well-defined a disease, because there are not many cases. It's also something I don't know a great deal about, and I would like to get off the subject." Landfeld asked, "Is it new?" Manners said it had been around for at least 15 years. Madge asked a question about anemia and manners said, "You've got me. I don't know a thing about it and have had no personal experience with it whatsoever. I would rather talk about something else. Let's see what we have on the ward." On our way to the ward, Landfeld said to me, "He's an endocrinologist. You can tell he's not a hematologist."[12]

This incident is typical. The specialty of a particular visit determines the content of his teaching. No matter how they try, residents and interns cannot maneuver the visit as they say they can. The price they must pay for the teaching they receive is to accept the visit's definition of what is and what is not for him to teach. An attempt to change the content of his teaching is easily resisted. The visit simply invokes the rule that the group will talk about something he knows about. Interns thus pay further for their teaching by limiting their inquiries to the interests of whoever at the time is visiting.

Though the interns are not entirely satisfied with this limitation, it is precisely what makes the relationship rewarding for the visiting physician, who considers visiting rounds primarily to be for their benefit. The experience is profitable, they say, because it gives them a chance to bring themselves up to date by discussing the problems of their particular specialties with interns and students.

Interns, on the other hand, play the game because the contact allows them to claim specialized assistance with particular difficult problems. Interns can, when they need to, present the visit with a difficult problem about which he does know something. They can also use him as a consultant. A claim for assistance of this sort is different from the claim they make for teaching.

> White, a student, had presented a 36 year old patient. "While you're here, there is something I would like to ask you," Powers (intern) said to Schwartz (visit). He had a patient's chart in his hand and asked Schwartz to look at an electrocardiogram. Powers asked, "Would you call this a normal electrocardiogram?" Schwartz looked, then said, "Of course I would; I have." Pointing to the top of the EKG he said, "That's my name." He had signed as the physician who interpreted it. Powers laughed and said, "How about that? It's embarrassing. But could you explain why you thought it was normal?" The visit did. I knew that Powers knew Schwartz had read the EKG. When I asked why he did what he did, Powers said, "Who knew why he called it normal: But he was here, and I had the chance to have him explain it to me. I probably would never have had an explanation if he wasn't here."[13]

The relationship with the visiting physician, then, is social exchange. First, interns limit their interests in exchange for instruction. Because they benefit, they reciprocate by setting the stage for visiting physicians. The visit, in turn, has whatever satisfaction he gets from teaching and earns the regard of interns. Second, interns get help with particular problems while the specialist gets to see more cases related to his work. Thus the relationship benefits both participants.

The Consulting Physicians.

A visiting physician uses the patients presented to him only to illustrate the universal, rather than to deal with particular aspects of a given case. From him the interns learn the concepts of diseases and generalizations about their etiology, progression and management. But interns have to handle the immediate problems of specific patients. For this they need teaching less than advice and assistance in the management of disease as they encouter it on the wards. Information of that sort they get from consulting physicians.

Many physicians at the Boston City Hospitals are established authorities in the various medical specialties. Others are competent younger men who are completing residencies or conducting research under the direction of established physicians. These are the residents, fellows and clinical investigators, who work in the research divisions of the Thorndike Laboratory or in the hospital's departments and specialty clinics. Each such group is organized around some special skill or area of knowledge and takes a special interest in a particular kind of patient. Like the visiting physicians, these men are interested in the universal aspects of medical problems. They are not concerned with routine patient care. But they make ward rounds regularly and give advice or assistance with particular aspects of specific patients' problems. They are the consulting physicians.

Though a visiting physician may occasionally serve as a consultant, physicians representing each of the research divisions, departments, or clinics regularly offer this service. There are arrangements by which interns may get immediate consultations or request regular ones. Each group of specialists usually has someone on call at all times. When an emergency consultation is requested, consultants usually come to the ward immediately. If there is no emergency, however, interns must follow a standard procedure which consists of submitting a written request for advice or assistance. The request may be delivered to a particular consultant or passed on to the night float, who distributes all such requests. Since the night float does not distribute the requests until the morning after he receives them, there is some advantage to personal delivery. When a physician receives a request for consultation, he is expected to see the patient concerned as soon as possible. Interns would like to have a consultation the day after they request it. If they follow the established procedure, they should have no difficulty getting it.

But interns do not get help by simply asking for it. True, the only formal condition for a consultation is a need for advice and assistance. Interns supposedly need not meet any other conditions or incur any obligations. In fact, though,their relationship with consulting physicians is not unconditional. There is an exchange involved.

The major condition of this exchange is the same as that with visiting physicians. That is, interns must seek help only with problems relevant to the experience, knowledge, and interests of the consultant. Otherwise, they can run into trouble.

> In the staff dining room I sat next to Brook (consulting physician). "Well, will you be available to see a patient today?" Samuels(intern)asked.Brook said, "No, I have the weekend off. I'm going to take a long weekend. I will be here late Monday. Why don't you put in for a consult?" Samuels asked, "You are at the Heart Station?" Brook nodded and said, "Yes, just write out a consult request and drop it in my box." "We usually leave it for the night float," Samuels said, "and I wrote one a week ago." Brook asked if Samuels had requested him specifically, or if he had just requested a consult. "I asked for you specifically," Samuels replied. "It's strange that I haven't received it," Brook said, "but it may be in my box now. I haven't been over to the station today." Samuels told Brook that

> he had clinics on Wednesday and missed Brook at the rounds he made with his group on the wards. "Well," said Brook, "I'll be there Monday and I'll stop in. How would that be?" Samuels said, "That would be great. I'll expect you then on the ward." Brook got up and left the table. Almost immediately Stern (intern) said, "If you're having trouble getting consults, you should write out a list of questions that'll grab him. You shouldn't just request a consult. I think some questions that would interest him would get him on the ward." Samuels said, "I'm not having trouble getting consults but I guess this one could have gone better and I would have had it sooner." Samuels was obviously, in my opinion, having trouble getting consults.[14]

When a consulting physician is requested to advise an intern on a problem that doesn't especially interest him, he takes his time responding, if he answers at all. The intern must, therefore, always try to capture his interest. This endeavor often inspires interns to amazing literary efforts. First they try to convey to the consultant that they have thought about the case and have some important questions. If this task fails, they resort to other plays:

> We went to see a patient on the wards with Peterson, the visiting physician, who asked Davis, an intern, about the patient's stool. "I have not," said Davis, "been able to coax the GI (gastrointestinal) group to look at her stool. I've looked at it but I can't really tell a thing." Peterson asked, "The GI group aren't interested in her?" "You can say that but I can't," said Davis. The other interns laughed. Peterson nodded and said, "I know it's hard to get them moving." Davis told Peterson that he thought he had interested the x-ray group in the patient. "I've contacted them and they're trying to work her in some time." Peterson said that this was okay but that he thought Davis should also get the GI group interested. "I'm telling them both that the other is interested. If a free enterprise system works, I should get some results. If I can get a little competition going between them, I may get both groups to help." There was more laughter.[15]

The consulting physicians have other duties. They make rounds of patients with other members of their group. Most of them also spend time doing laboratory work. All the patients the interns want them to see may not interest them since their problems may not bear on current research or contribute new knowledge. Interns recognize the implications of these circumstances for their relationship with consulting physicians.

> "Most of the consults aren't too good," Taylor (intern) told me. "They don't have the time to sit down and talk over all of your patients with you. They are not interested in all of your patients. You could get a lot more out of them if they had more time. The nerve consults are probably the best because they have more time. They do full-time consulting." I asked, "Is it easy to get a consult?" Taylor said, "No. Well, if you really need them, yes. But from day to day, no. Most of them are more interested in doing research. They begrudge you the time and try to make consulting the least of their activity. If you have a difficult problem or any unusual one, they come. You don't use them just for advice. You usually put in for a consult because you want procedures done that only one of the group can do. You usually go to your own house staff for advice because they have as much to say and are actually better than many of the consults. The assistant resident and the senior resident can usually answer most of your questions. And if you have an esoteric question you can ask the consults who are probably working on it."[16]

The practice of seeking advice from residents is a result of the limits consultants set on their relationships with interns. Implicit in the practice is the intern's recognition of the conditions that justfiy a request for a consultation. First, the request must concern problems that interest the consulting physician. The physician whose advice is sought does, of course, benefit by this recognition of his superior knowledge, but he must pay with his time. Since he has a superordinate position to begin with he may not consider the reward worth the price. Interns must, therefore, present their requests as pooprtunities for consultants to see interesting patients. Finally, they must not seek consultation unless their questions cannot be answered by residents on the wards. Consultants do not add to their reputations by answering questions that can be handled by people with less experience and training. And they do not add to their experience or knowledge by seeing patients with routine problems. Interns are aware of the terms of their relationships with consultants:

> Pere (intern) said, "Well, the consult should be available at all times when the intern wants to see him. Whenever the intern feels the need for information about the diagnosis and treatment of specific diseases, the consult should provide the information freely. He should help the intern decide what to do, but never take the situation out of the intern's hands." He laughed, and I asked, "Wht?" "Well," Oere said, "believe me, consults can be obnoxious. I don;t know why some of them behave as they do but they are not willing to part with information freely. I don't know why but some consults make you feel sorry you asked them to come to see a patient. They seem to be busy with other things. The kind of information you want isn't the kind you always get. You want to know as much as they can tell you about a patient's disease and the possible differential diagnoses or ways of treating the patient. They come on the ward and talk with you. Maybe they give you a reference or two but they don;t tell you everything they know about a disease. The consults act like they're sacred bearers of the word when you ask for the kind of information you really want. You do better talking most of your patients over with the residents. But if it's a disease the consult is really interested in, he tells you a lot. A lot you didn't even ask for. You call in a hematology consult, for example, and he says its probably this but it could also be that. He tells you to do this test to rule one or the other problem out and tells you to treat the patient with this or that. That's routine. When the patient interests him or you have some real questions, he tells you je just happens to be doing a study on this and could he perform a test on your patient, or would you watch the patient carefully.

> Then he tells you what he knows and what is being done and what the data is and so on. This helps me because he gives me more than I asked for. He also gets me involved in something that relates to his interest and my patient." 17

Generally, interns accept the limitations placed on their relationship with consulting physicians. This does not mean, however, they are satisfied with that relationship. They are displeased because consultations are often difficult to obtain and because they believe that the consultant often benefits more than they do from a consultation.

> I asked Daley (intern) if he was going to request a consultation. He said, "I'm at the point where I feel I can handle things pretty much by myself. When I do have an interesting problem, I like to talk it over with a consultant but the fact of the matter is that I don't need him as much now as I did at the beginning of the year. I still put in for as many, and I still get as many as I did before. But the benefits to me and the patient are not great. If I were a consult, I think I would feel more responsibility to the interns. I would teach more. They only give you essential routine most of the time. I get the feeling that it's not for my benefit but for theirs." I asked how the consultants benefit from a consultation. He replied, "Well, like this lady here with anemia and neurological complications. I will write a request for a neurology consult. What I am saying to him is here she is, come and see her. She's got some interesting complications. I don't need him to tell me she's sick. But she would be an interesting patient for him to see. I think half the consults I request are like that."18

There is another aspect to the situation:

> When we had finished visiting rounds the assistant resident asked, "What do you think of Tucker (consulting physician) today?" The intern, Newton, said, "He was great. He had a lot to say. You know, he can take a temperature, pulse, ask a couple of questions and suddenly he had the whole prospective. You see the patient and the problem in an entirely different way. You have a new slant on the disease and the treatment." Another intern, Markman, said, "You know one thing about Tucker, though, you have to watch him. He looks at you and says, 'Leukemia, what's leukemia?' He does it in such a way that if you don't watch it you get sucked in. Then you're giving him all the latest poop. He gets a lot more that way than you do."19

Since a consultation may not benefit an in-ern or his patient, interns could be expected to request them less often or not at all. A consultation, however, is not always a request for advice, it may involve assistance of another sort. If an intern is attending a handicapped patient, for example, he may request a physical therapy consultation. Later, when he is ready to discharge the patient, the fact that he had the consultation will facilitate the process. We have already seen how a consultation with a physician from the diabetes clinic saved an intern the time and trouble of cutting toenails. Consultants can often assist interns by performing special procedures.

> "Tell me," asked Fox, an intern, "can you do a bone marrow in the outpatient department?" No," said Myer, assistant resident, "you're not set up to do it. It's not complicated to do. In fact, it's easy. But you're not set up." Laughingly Fox said, "Just give me a needle." "No," said Myer,"You don't want to do it that way. Just schedule a hematology consult next time your patient will be at the clinic. Then they will come over and do it for you. That's the way to do it. No problem for you." "Do you think we need a bone marrow?" asked Fox. "You don't need much," Myer said. Henry, a senior resident, said, "They 'll just grab a hunk and smear a couple of slides. It doesn't take a big piece, and they don't mind doing it." "Okay," Fox said, "it sounds easy. I'll do it." [20]

Interns also continue to request consultations because they can occasionally select patients whose problems interest them as well as the consulting physicians:

> I asked, "Do you mean to say you selected that patient especially for the consult?" "Yes," Sudman replied, "I wanted to know more about endocrine disease. I had a problem I knew they were interested in so I requested a consult. I gave them a patient they could say a lot about."[21]

Finally, interns continue to request consultations because they are expected to do so. The consulting physicians are interested in particular kinds of patients for their own reasons, either to further their knowledge or to advance their research. Whatever they need patients for, it is almost impossible for them to keep watch for the kinds of patients they need. Interns do this for them.

> "Think of it this way," said Hoyt (intern)," as a big box. All the patients are in a box. The Thorndike people have to know what's in the box. The patients can't run away. They make rounds. But they may miss a patient they really wamt to see. You keep an eye out for the patients they want, the patients they need to do their research. If you find one, you give them a call." [22]

Interns are repeatedly told that clinical investigation is a part of the best in medicine. "The conferences are all quite good," they are told, "but the best teaching occurs where there is clinical investigation." The Thorndike physicians tell interns that the physicians on the wards are an important part of the Harvard Medical Unit. What their part is they learn from the clinical investigators:

> We attended a conference with physicians from a specialty group. "The Thorndike people are here to help with diagnosis and treatment," Dr. Newpril told us. "As the year goes on you will need our help less, but we will still depend a great deal on you to pick out the problems we're interested in. I can't emphasize too much our dependence on you. What we can do for you is not that easy to answer, but we will always be available as you need us. We will also try to keep you informed of what we need. Any patient with complications, abnormalities, certainly deserves our attention. Though it is common that many patients with, for example, diabetes have other abnormalities, we would like to see all such patients and would be very appreciative if you would give us a call. We rely on you to get the material for us." [23]

Interns obligate themselves to consulting physicians the first time they seek their help. In exchange for valuable information or services they must furnish the consultants with information about patients who might be useful in clinical investigations. Though interns may not need much advice after they have been at the hospital for a time, they obligate themselves during the first few months of the internship. They are expected to discharge that debt for the rest of the year. In time, though. they themselves begin to set conditions for further service to consultants:

> Seaman (intern) told me that he has become a ward politician. I said that a Thorndike physician had told me he had to be a politician too. that he had to get along with the interns. "Oh sure," said Seaman, "the reason they do have to get along with us is because they want our patients to do experiments on and that sort of thing. If we don't care for what they are doing, then we are not going to tell them about patients we have or say you can do what you want with my patient. Since the intern really has the say about what's going to be done with his patient, unless he gets some kind of benefit from the consultants, he's not going to let them do what they want. Why should I say, "sure do a bone-marrow biopsy on this patient?" I think, in order for them to have the privelege of doing things with my patients, they have to offer some services too. I make them tell me everything they are going to do, and I want it explained to me." 24

When interns keep clinical investigators informed and permit them to use their patients, they obligate those physicians to provide more than information regarding essential routine. By discharging their obligations, interns place themselves in a position to demand teaching performance from consulting physicians. The threat that they will do so is always a possibility, though I did not once see an intern refuse clinical investigators the permission to use his patients. An intern occasionally complained that the clinical investigators were using his patients as guinea pigs, but he knew that his complaint would not influence those in authority. Interns are, in fact, told that they may not always understand why certain procedures are necessary, or that they may think these things are not in the best interests of their patients. When they have such doubts, they are supposed to consult the clinical investigator. They do not need to be told that any difference of opinion will be resolved in favor of the latter. It is, therefore, more the threat than the actual exercise of sanctions by interns that places them in a position to negotiate for teaching performances.

One final fact suppots my contention that the relationship between interns and consultants is social exchane. Interns have the least difficulty in obtaining consultations with Thorndike physicians. When they request help from physicians affiliated with other medical schools than Harvard, they are often told that those physicians are very busy, and they must wait. Generally, a Thorndike physician will, if all conditions are met, provide consultation as soon as possible. Interns think that this difference results from loyalty to the Harvard Medical Services. This may be so, but there is another explanation: Interns are in a better position to negotiate with Harvard physicians than with those from other medical schools. The Thorndike physicians recognize their obligation to interns who are supplying patients for clinical investigations. They get valuable information from interns and reciprocate by furnishing consultation when the occasion arises. Physicians at the other medical schools may not feel indebted to the Hrvard interns. In other words, the conditions for social exchange do not exist between Harvard interns and non-Harvard physicians.

Exchange with Subordinates

Interns must establish and maintain relationships with nursing and ancillary personnel. They need the services of a variety of people if they are to get their own work done. For example, an intern decides what the patient's bed, board. and measures will be, but the nurse is the one who implements the decision. Interns also decide what tests should be made but the nurses collect necessary specimens, and the technicians do the tests. Interns must have the cooperation of the people who provide such services.

The M.D. degreee empowers interns to order the services of nurses, aides. orderlies, and technicians. The hospital delegates to them the responsibility for patients and gives them the power to coordinate the patient-care activities of subordinates. An intern supposedly has the authority to tell other people what to do. So long as he observes hospital policy, he could command nurses to carry out his orders, porters to transport patients, and technicians to do laboratory tests. By exercising the power they have, interns should be able to obtain the services they need.

Interns do not, however, exercise their power. A number of circumstances make it difficult for them to do so. First, there is a shortage of of all kinds of personnel at the Boston

City Hospital. An intern who would indiscriminately command services would be taking an advantage that could earn him the disapproval of other interns. To demand all he needs of limited services is to deprive other interns who are also in need.

Besides obliging interns to be judicious in their exercise of power, the shortage of personnel also increases the value of services. There is a great demand for service and too few people to supply it. Since interns do value the services but do not, in fact, command them, the conditions for social exchange obtain. Interns must induce service personnel to help them by offering them something in exchange. Since they are dependent on subordinates, their power over them is reduced.

Other forces operate to reduce the power of interns. For one thing, as we have seen, they rely on subordinates to teach them the ropes. For another they must face the possibility that a subordinate might refuse to obey an order. In such a case, the intern would have to respond by making threats which would be pointless unless he could carry them out. Residents tell interns this is impossible, because employees are political appointees and have the support of administrators.

> An intern, Newton, was complaining to a senior resident, Hedge, about aides. "How can we get rid of these people?" Laughing, Hedge said:

> "You don't. I remember when I was an assistant resident, there was an aide I wanted to get rid of, and I complained about him. I wanted him fired, but I almost got fired." Newton said: "You mean you were a house officer, and almost got fired because of an aide?" "That's right," said Hedge. "You have to watch who you take on."[25]

The implication is that hospital administrators will resolve any difficulty in favor of employees. The administrators do depend for their jobs on the good will of politicians. They may be inclined to favor employees over interns. Whether or not they do is less important than the fact that interns think they do, and thus conclude that they have little if any actual power.

If interns had power over subordinates, subordinates would be anxious to serve them in order to earn their good will. But since they do not actually have such power, the subordinates are not much concerned with pleasing them. They may even have to be reminded that they are obliged to follow orders. Unable to command, interns must induce cooperation. Since their relationships with their subordinates are not really between people of unequal power, these relationships are social exchanges.

The means by which interns obligate subordinates to serve them is the crux of their relationship. An intern who tolerates unimportant omissions and delay gains an advantage over subordinates. He earns a reputation for being tolerant and obligates subordinates to please him because he is reasonable. A tolerant attitude also asserts the intern's right to service by reminding subordinates that they owe him more than he is asking.

> The patient had been complaining about the amount of medication he had to take. A nurse asked Grant [intern] to have a talk with him. The patient got out of bed and started to walk down the corridor. "If you're going to void," Grant told him, "don't forget to take that jar with you. You have to save it in a jar." The patient shrugged and came back to the bed to pick up the jar. After the patient left, Grant turned to me and said: "As far as I know, he needs everything he is getting. I may have to rewrite my orders but it looks right to me." A patient in another bed called Grant, saying: "Doctor, you said you would take this out. Please take this [intravenous] needle out." Grant walked over to the patient. A nurse who was in the room said: "I'll get it for you. I'll do it." Grant started to take the needle out, but the nurse came over and said: "I said I would do it for you. You don't have to do it." Smiling, Grant said: "You're right, I don't. I didn't hear you. I know you have a lot to do, but if I heard you, I would let you do it. You can finish, if you want." We walked away from the bed. "I didn't hear her," said Grant. "I'm always willing to let the nurse do anything she wants. The nurse is always right. Never disagree with the nurse. I don't ask them to do too much, and I never disagree with them. That's the way to do it." I asked him why. He said: "If they're right this time, they'll just be a little more willing to do what I want them to do next time. So, as far as I'm concerned, they are always right. They'll do anything for me." I laughed and asked: "Is that the secret of your success?" "Yes," Grant said, "a good intern knows more than how to care for his patients. He knows how to get things done, and that means getting along with people."[26]

Merely agreeing with people is not enough. Genuine tolerance requires that interns do some things for themselves.

> We were making work rounds. Little [intern] walked into the patient cubicle. "What are we looking for?" Boyd [intern] asked. Little said, "We want to clear up her lungs." Boyd asked, "Do you think we will be able to clear them up here, in the hospital? What are we doing to clear up her lungs?" Little told him that he had not been able to identify anything by sputum sample. He was just positioning the patient to help clear the lungs. The assistant resident explained that position was very important in these cases. "If she just lies there, she won't clear up,"he said. "You should order her turned every 30 minutes." Boyd said: "That would really require more nursing than we have available. You'll have to do it yourself." With Boyd's help, Little got the patient out of bed.[27]

> "You know," Cohen said, "a lot of my time is spent on things that are not directly related to patient care." "Like what?" I asked. "Well, like having to do a drainage. You have to do it yourself. Things that I have to do like that would be done by technicians at other hospitals. The technicians would probably do the physical therapy, coughs, breathing exercises, things like that. I think many of these things have very little to do with being a doctor and are more things paramedical personnel should do. But in this hospital, there are not enough paramedical people, so we do these things ourselves."[28]

Tolerance also requires interns to spend a lot of their time running around the hospital:

> Yost and I were having coffee. He had just returned after picking up some blood. "You have to be organized," he said. "You learn it during the internship. Another thing you have to learn is to keep good personal relations with the nurses

> and so on. This hospital is like a little ward, you know. You have to be a ward politician to get along. You have to be willing to do a lot. Like I knew I could have this blood I needed if I went over and got it myself. People would be too busy to deliver it. You have to run around to keep things going well. They are overworked, and you have to keep them happy." "Do you work," I asked, "at keeping people happy?" "Oh boy!" he said, "You have to! You manipulate for all you're worth. If you send down an x-ray and don't go over, you may not get it. So you go over. They still may tell you they're all booked up. But you can say come on, I'm a good guy. Okay, they say, just this once. It's true for lab technicians, everyone here. Just because you're a doctor is no guarantee your patients are going to get what they need. Man, you've got to go and get it for them."[29]

When they go to get what they need, interns must also be tolerant. They cannot rush the people who are serving them. The point here is that going in person is not doing things the way they should be done. Subordinates feel that requests made in person are special; they do not feel obliged to grant special requests. A request made as it should be, usually in writing, must be granted in due time. But special requests disrupt the routine and subordinates reserve the right to refuse. When he grants a special request, however, a subordinate does more than he has to and thus obliges interns to continue being tolerant.

> Since Boyd wanted some x-rays, we went over to get them. They had not been developed and were in a pile on a table. He picked his pictures out of the pile. A clerk, who hadn't offered to help us look for them, asked: "You sure you have the right

> ones?" "I took the one that had my ticket on it," Boyd said, "and the one under it, right?" The technician said that was right. "Is there a chance of having them developed?" asked Boyd. "Why don't you go talk to the man?" said the clerk. "If he isn't too busy, he could do it for you now." We went to the developing room. There were some people standing around talking, and we had to wait until they left. Boyd asked if the pictures could be developed. The technician said: "Maybe, if you don't make this a habit." He stepped into the darkroom. When he came out, Boyd asked how long it would take. "Don't know," said the technician "five or six mimutes. Why, can't you wait?" "Yes," said Boyd, "if it'll only take a few minutes, we'll wait." I said: "We can come back later." Boyd laughed. "If we do that," he said, "we'll never see those pictures again. He'll do it for me now, but he wants me to know it's a favor. But then that's the way it is at this hospital. You scratch their backs, and they scratch yours."[30]

And so we have the conditions of social exchange between interns and hospital employees. If subordinates do not reciprocate the interns' tolerance, they violate the conditions of the relationship.

> An intern, Wright, said, "I think you have to be fair with hospital employees, and they should be fair back. A lot of times they're not fair. I mean some of them are just dishonest. I want to get an x-ray taken. I write the requisition and take it down myself. You have to make sure it gets there. I don't rely on anyone else to do it for me. I set the thing up to get a chest film. A technician says he will be up to the ward to take a portable film, but he never comes. That kind of thing is dishonest."[31]

When interns call hospital employees dishonest, they refer to violations of the conditions of their relationship, not to illegal activity of any sort. Since interns have little or no recourse, they can only hope that violations are the exceptions that prove the rules of social exchange. Thus, they are more dependent on and committed to exchange relationships than subordinates.

Besides being tolerant, interns do have some other ways of inducing subordinates to cooperate with them. Though their power is limited, they do have status - as much as any other group at the hospital. This is capital, which interns can expend as they need to. The medical degree, of course, is one source of interns' high stature. They are members of the most honored and lucrative of professions. In addition, their social origins are middle class. Nursing is not an established profession, and most nurses at the hospital are only striving to be middle class. Other employees have even less status than nurses. Thus interns are socially superior to virtually all the people with whom they must work.

"The fact that many people find it rewarding to associate with superiors means that those of superior status can furnish rewards, and expect a return for them, merely by associating with others of lower status."[32] If this is so, it is not surprising that most hospital personnel find it rewarding to associate with doctors. This means that interns, who have the status of physicians, can furnish rewards for which they may expect a return from the people with whom they must work. Interns have little to lose by associating with subordinates. They cannot lose power, because they have little. Treating subordinates as equals can only ease the relationships by removing an impediment to sociability. The reduction of social differences between them can only further obligate subordinates to interns.

> The senior resident had called a meeting of the interns and assistant residents. I was with Peters [assistant resident]. "Maybe we should ask our sociologist [pointing to me] to tell us something about my next topic," said the senior resident. I told him I would have a lot to say later, but not now. He laughed. "I'd like to suggest," he continued, "that you interns make an effort to talk with the nurses every chance you get. I think some nurses are put off by what they think are social differences. They feel that they are the social inferiors of the medical staff. Not the professional inferiors, but the social inferiors. They don't quite feel equal to you. I think you have to make an effort to overcome this. One way I think that you can do this is by sitting down with nurses for a cup of coffee. There are other things you can do but I think the time between 10 and 10:30 a.m. can be used for coffee and cake and talk. I think this is part of your job." "I agree," said Peters. "It's important to talk with the nurses. There's one thing, for example, that I don't think is very well known, and that's that the final route for all medications and drugs is on the white cards that nurses carry. You can write orders and make notes until you're blue in the face, but if it's not on their white cards, it will never be delivered. When you are sitting with the nurses, it's a good idea to take a look at those cards to make sure everything is on them that you want on them. You'll really get your work done if you do this." "That's

> right," said the senior resident. "If you ask the girls to bring in coffee and cake, they'll be more than happy to do so. In any case," he concluded, "the thing is to remember to get along with the nurses."33

To get the nurses' cooperation interns must establish egalitarian relationships. The coffee break is an important overture that interns make to overcome the impediments to a sociable and profitable relationship with nurses. They make an effort to spend this time with nurses though there are many other things they could do with a free half hour. The results of these interludes are usually what interns hope they will be.

> I was waiting for Dewey and Cook /‾interns‾/ to come up, but today, unusual as it was, they did not come up to the third-floor laboratory. It was after 10, so I decided to go down to the ward and see what was up. I found Dewey preparing medications, a good reason for staying on the ward, but not in the kitchen. Cook was also in the kitchen, writing in charts and the order book. The nurse who had been on the ward left yesterday to have a baby. Today there were two new nurses. I sat down next to Cook, who said: "Happy to report it's a great morning!" He returned to the charts and order book. "Hey," he said, "this patient has gone home! How come the sheet is still in the book?" One nurse said: "We figure if we leave it, you'll write some orders by accident that we won't have to do." Both nurses giggled. Cook smiled and continued to write orders. A nurse asked me if I wanted a cup of coffee. "No," I said, "but it's the first time I've been offered a cup in the morning." A nurse said: "We can do this every morning." The other nurse said: "It'll give us a chance to get our notes straight." Cook said that it was a good idea, and Dewey nodded his head. It was a rather pleasant get-together, relaxed with a give-and-take. This was the first time /‾approximately two weeks

> had passed_/ that I saw any people except the old nurse and aides seated in the kitchen. Cook asked the nurse if there was an eye clinic at the hospital. "Yes," she said, "but why?" "I have a patient," Cook replied, "that wants to be fitted for glasses." The nurse said: "It's best to let her handle it through the clinic, and not on the ward. They don't like to do it on the ward." "Should I," asked Cook, "handle it at the outpatient department?" The nurse nodded. Turning toward me, Cook said, "I guess we better get upstairs."[34]

By making such overtures to nurses interns do expend some status, but in return they gain the nurses' good will. Nurses do appreciate the time interns take to have coffee with them. In fact, they point out the benefits of doing so. When the nurse remarked that coffee breaks offered a good way of keeping the work straight, she was inducing them to continue the relationship they started. Her accepting a role teaching Cook the ropes was also reciprocity, a further inducement to continue the relationship as social exchange.

Interns do, however, have to make some greater expenditures of status. The difference between their stature and the nurses' is not so great as that between interns and other hospital personnel. In dealing with clerks or technicians, for example, interns must yield a great deal of status, since these people are not even quasi-professional.

> Warren /_intern_/ picked up a telephone and, looking at a card he had taken from his pocket, dialed a number. When he got his party he said: "I wonder if you would be very kind and give me something very important off a record you have. I need to know

> where a patient was transferred from. Could you look it up for me?" I said: "He is being very polite." Smith /¯assistant resident¯/ said: "That's what I told him to be. I told him to play up to the girls in the record room so he won't have any trouble getting what he wants. He's learning."[35]

To get things done, interns must reduce the social difference that separates them from their subordinates. They do so by deferring to hospital employees just as they would to people with equal or higher status. Like the coffee break deference is an overture acknowledging interns' dependence on subordinates. It implies that their relationship is not one of unequal power but of egalitarian exchange.[36] Interns usually define their tolerance and courtesy toward subordinates as "diplomacy." When they become impatient with employees, they know they are violating the conditions of their relationship.

> Boren /¯intern¯/ told me that the patient who had been saved by resuscitation the day before had died. "Did you hear what happened?" he asked, then explained that they wanted to take the cadaver away and change the sheets, but that other patients refused to pull their drapes shut. The attendant who had come for the cadaver pulled the drapes shut around him and waited and waited, but the patients just walked around. The cadaver could not be taken away with patients walking around. The intern had finally shouted: "Nurse, get the patients in bed and pull those drapes so we can pull this cadaver the hell out of here! How about that?" Boren asked. "Is that being diplomatic, or is that being diplomatic?" "I know," he said, "it's not the way to do it, but it had to be done."[37]

Interns are usually extremely tolerant and very polite.

"Well, you know best," they acquiesce, implying that their relationship is one between equals. If an intern is not diplomatic, he may have difficulty getting the assistance and services he needs.

> Grant /¯intern¯/ came on the ward and announced that the biochemistries were back. He handed a stack of sheets to Newton /¯intern¯/, one for each patient for whom tests had been requested. Newton looked the sheets over and asked: "Aren't the ones I sent in yesterday back yet? I'll have a fit. How about the x-rays? Are they back yet?" "No," said Grant, "they're not, and having a fit won't do any good." Newton laughed and said: "I guess you have to be diplomatic."[37]

> We were in the lab. Smith /¯intern¯/ was at a desk writing in charts. I said: "I thought you would be home in bed by now." "I will have you know," said Smith, "I'm the Dr. Kildare of BCH, and if I don't do my work, Dr. Gillespie /¯nodding toward the assistant resident¯/ will chew my ass out." The assistant resident told me that Smith did nothing but bitch. "If the world was in trouble," retorted Smith, "an AR would be the one who screwed things up. And an intern would get his ass and the world out of trouble." "If he worked as much as he talks, we could all go home," said the assistant resident. Laughter. Newton /¯intern¯/ said to me: "That Smith, he's a funny man. You know, he looks like he doesn't care, but he gets his work done. I don't know how. He's not diplomatic, but he gets his work done. He's funny." "Funny how?" "Ha, ha funny," said Newton. "He goes around bitching and complaining. He tells people straight out what's on his mind. The nurses don't particularly like him, but he doesn't take a thing from them. That's what I mean. He can kid with people, but he puts them down too. A lot of times people don't know if he's kidding or not. It's effective." I asked: "How's it effective?" "I guess," Newton said, "I mean it works for him. He gets people to do what he wants them to that way, though it wouldn't work for the rest of us."[38]

The kidding approach to subordinates does not always work. Smith, for example, did get along with some people, but others did not appreciate his approach.

> Smith had a blood chemistry he wanted done, so he took it down himself. When he entered the lab, he immediately asked in a song? "Who's going to do a blood chemistry? Who's going to do a blood chemistry? Which pretty girl is going to do a blood chemistry for me?" The first girl he came to looked up, smiled and sang: "Not me. Not me." Laughing, Smith just handed her the specimen and said, "Take good care of that. That's blood, though you may not know it."[39]

This time it worked, but his manner didn't always get him the help he needed:

> Smith needed some help with a patient. He looked at one of the nurses and said: "I suppose you want to go out with me." "I think you're cute," said the nurse, "but not that cute." She walked away. He turned to the other nurse and asked: "How about you?" "I don't think you're cute at all," she said, "so forget it." "How about that?" asked Smith.[40]

Interns compensate for their lack of actual power by inducing people to assist them. The diplomatic approach to subordinates is the most profitable way for interns to get their help. The resulting egalitarian relationship benefits subordinates by permitting them to retain control of their work. They, therefore, reciprocate by giving interns the service they want and need.

Fair Exchange Between Interns and Residents

"The patient is my responsibility," interns say, " and the ward is the responsibility of the assistant resident." Assistant residents agree. This understanding of areas of responsibility prescribes the relationship between interns and assistant residents. The assistant resident's job is to enforce the rules established by hospital administrators and the physicians of the Harvard Medical Unit. Interns must obey those rules. The assistant residents have enough power over interns to tell them what to do. In principle the relationship is one between superior and subordinates.

In practice, though, the residence of power is not the basis of the relationship. The relationship cannot actually be prescribed, because the limits of responsibility are not obvious. When, for example, are assistant resident's instructions concerning patients a ward matter, and when are they a matter of patient care? If an assistant resident insisted that his orders be obeyed, he could be denying an intern his right to responsibility for his patients. The line between ward policy and patient care is not well enough defined to permit interns and residents to operate according to the principle of ward organization. Therefore they must negotiate a relationship.

It is not the inequality of power that allows residents to enforce rules against interns, but the great inequality of information. The assistant resident has successfully passed through medical and other situations that the intern has yet to meet and manage. He knows things must be done at the hospital if they are to be done at all. Interns need to know what residents know. They depend upon residents for advice as well as assistance and services. The intern accepts a subordinate position because of this dependence, not because of the inherent power of residents.

> Prentice [assistant resident] and I entered the laboratory. Kaufmann [intern] was waiting for us. "Can I go ahead and give Mr. Jones something for his pain?" he asked. "I don't see why not," Prentice said, "but what do you have in mind?" Kaufmann said he thought he would start the patient on demarol. Prentice thought for a minute and said: "I don't know, that's a little strong. We don't usually start them on anything that strong. There are so many things that will kill pain but are not strong. I think you should think about other medications." "What would you suggest?" asked Kaufmann. Prentice proposed codein. Kaufmann nodded and said: "I haven't fed Mr. Smith because I'm scheduling him for some x-rays." "Why for x-rays?" asked Prentice. "Because there's a block there," explained Kaufmann, "and I don't know where." "Why don't you do a rectal first?" asked Prentice, adding that Mr. Smith might just be impacted and a rectal examination would clear up the block. Kaufmann thanked Prentice and left to see his patients.[41]

> A patient was shouting. He was having leg cramps and was in extreme pain. "I don't know what to do," said Harris [intern]. "I've never seen cramps like this before. What do I do?" "I think you give him quinine," said Booth [assistant resident]. Harris ran to the nurses' station and returned with a book of drugs by name and type. He thumbed through the book and said: "All I can find is that it's contraindicated for renal disease." A student was

> telling another intern that these cramps are very painful and that something had to be done for them. "Here it is," said Booth, who had taken the book from Harris. "It says one or two tablets. Why don't you start him on one. Okay?" Harris nodded and went to get the quinine. The assistant resident and a student went over to massage the patient's legs.[42]

Interns do have the responsibility for the care of patients, but they don't always know what to do for them. They depend upon the assistant resident for advice, which they follow since they have no satisfactory alternatives. Since interns realize their inexperience, the resident can influence them without imposing his will. He could, of course, issue orders, but advice works better, because it gets the same results without subverting the interns' responsibility. His advice benefits interns and places them in his debt as an exercise of power would not. The subtlety of the assistant residents' influence is not lost on interns.

> Landfeld, Hertman /‾interns‾/ and I were standing at the bottom of the stairs in the Peabody Building. I asked Landfeld how he felt about Goldson, his new assistant resident. He said: "I'm getting a lot out of him; he's an interesting guy. He's not after you all the time to get your work done like the other residents are." "I thought you liked your other residents," I said. "Yes," he explained, "I did. They were okay, but they have to be compulsive. Look at Booth. I don't know a more paternalistic person, but he's sneaky. He'd say 'Well, now I think we'll have to do that sometime tomorrow afternoon between 3 and 5.' That means we'll do it at four. That's how he was. It looked like he went all around the bush, but he was right on top of things. You were doing what he wanted without being told to do it. Goldson's isn't as compulsive as the other assistant

> residents. It doesn't bother him if you let some things go. He doesn't even try to get you to do everything. He's not a scut man like the others, like all of us who have been trained here at the Boston City Hospital."[43]

Interns do not resent the residents' advice, though they know it is how they coordinate patient care. They appreciate all the help they can get from residents.

> "The real thing is responsibility," Hertman told me. "That's what's important. Taking care of patients and making decisions, that's responsibility. But what's good about responsibility here is that you're not left on your own. The assistant resident is always around. He's not butting in, but he's there, and you can call on him if you need him. He's willing to help, but he's not telling you what to do. That's what's good about this internship."[44]

Interns respect the judgment of assistant residents and therefore follow their advice. The obligation they incur thereby, impels them to reciprocate by complying with assistant residents' requests. There is also the threat that, if they do not try to please, advice will not be forthcoming when they need it. Though the interns' dependence on them assures that their advice will be followed, residents take steps further to obligate interns.

Residents carry the hallmark of a physician. They have responsibility, and they have clinical experience, both of which the intern covets. A resident is more like a practicing physician than like an intern. He can grant rewards and expect a return for them by reducing the differences in status between himself and the interns. This in itself rewards the intern, because it indicates that he is making progress toward his chosen career. If the residents accept him as an equal, he is well on his way to being a physician. The resident understands this and is willing to play.

> "You know," Booth /‾assistant resident‾/ said to me, "there's more to an internship than book learning. How to get an x-ray is an example of something that's not in the book." I nodded but said nothing. Goldson /‾assistant resident‾/ asked if I had anything to say about the differences between interns, assistant residents, and senior residents. I told him I thought that residents made a conscious effort to be close to interns. "Yes," said Booth, "what would you, as a sociologist, call that?" Laughing, I said: "A manifest effort to reduce role distance." Smiling, Booth said: "You know, at the Massachusetts General they make no real distinction between the intern and the resident. The interns and the resident alternate on nights, and they do the same kind of work. Everything goes very well over there." "Maybe," said Goldson, "there's a point where you reduce role distance too much." Laughter. "No," said Booth, "I was a student over there, and everything was fine. The resident was still listened to." "Man," asked Goldson, "what is this role distance?" I laughed. "I don't know," said Booth, "but treating interns as equals is important."[45]

The assistant residents establish an egalitarian relationship with interns by not exercising the power they have and by taking an active part in patient care. They do physical examinations of most patients, write suggestions for their care, and discuss each patient with the intern responsible, but they are careful to leave the final decisions to interns. Residents do not order but suggest, and this after they have done many of the same things that interns must do. They also work the same hours and take their meals with interns. Interns are grateful for this sort of relationship and anxious to retain the residents' good will. "Residents are people just like us," they say, "reasonable guys who remember what it was like to be an intern, so they want to be of help." Interns come to think of residents not as superiors but as friends. It is difficult not to follow the suggestions of friends, particularly when they have your best interests at heart and want to help you.

Because of the interns' dependence on them, residents have no trouble coordinating their efforts when the interns are newcomers. But after the interns learn the ropes, the relationship will not persist as social exchange unless residents have something besides advice and friendship to offer.

> "When I got here, I thought Mayer / assistant resident / was a kindred spirit. Now, I think he's a little too much." "He's on your back too much?" I asked. "No," said King, "but he was just doing too much for me. I think that a little distance would be better for me and the patient." "Do you think," I asked, "that you were too close to him?" "Oh no," King explained. "By distance I mean he should sit back and think about what is going on rather than actually doing it. I remember once I was admitting somebody who wasn't too interesting, and there was another patient, a comatose patient. He went down and did the same kind of business I did with the other patient. These weren't his patients."[46]

When interns no longer need so much advice, they resent too much of it. At the beginning of the year they have every reason to admit their inferiority. Interns are not expected to know all they need to know, nor are they expected to be able to do all they must do. Later in the year, when they have gained experience, continued advice from residents is degrading. A resident who gives advice when interns no longer need it is implicitly denying that the interns have progressed. "When they are new," assistant residents explain, "they're asking us about everything, but later they think we're a pain in the ass, and that we just get in the way." This is not to say that interns do not want advice later in the year. Rather, they want less advice and more assistance.

> I asked Lynd /¯intern¯/ why he had wanted this particular internship. "The responsibility," he said. "That's why. You're allowed to do a lot on your own." I asked him if he had the responsibility from the start. "It really depends," he explained, "on you and the assistant resident. You depend on him for a lot at first. In the beginning, he's with you a lot. For two or three days he will go to admitting with you, but after that you should be on your own. That sheet they give you says the AR goes with you to the admitting floor each time. He really doesn't. He will if you really want him to, but by then you can go on your own. But he can help a lot of times by drawing blood or running over to get this or that. That way he's a great help to you."[47]

The more experience the intern acquires, the less he values that of residents. The logical conclusion of this decreasing dependency would appear to be anarchy, with the residents left with nothing to exchange. But residents have ways to replenish the power they have willingly depleted. They still know more medicine than the interns do. Thus they can continue the relationship as exchange by providing service and acting as a source of information.

Interns with experience are less amenable to control and try to set their own level and direction of effort. Though interns now act independently of residents, they still accept their direction when there is a question of what should be done.

> With only a few weeks left, Hertman [intern] and I had a talk. "I worked out my own way of doing things," he said, "though the assistant resident still sets the pace. It depends on how much he demands of an intern. He points out things about patients that you may let slip. I think he lets some things slip too. You may have a sneaking suspicion that a patient has some disease or other, a real long shot. The AR might think he doesn't. You can go ahead and do all the tests to find out. On the other hand, the AR may think the patient has something significantly wrong, and you don't think it is significant. You go ahead and find out. The AR, in the sense that we usually do what he says, has authority. We don't differ very much or often, but when we do it's his word, and we try to do the things he wants us to do. We usually think alike about most problems, so there's never any trouble. There isn't even trouble when he asks us to do things we don't think have to be done."[48]

When an intern and a resident disagree on medical procedure, they usually resolve the difference by seeking the opinion of a specialist. The consulting physician views the request as nothing more than a need for his advice on a difficult medical problem, not an attempt to settle a problem of authority. Consultation is not, therefore, a threat to the intern and residents cannot use it as a means to assert power. A resident uses consultants to demonstrate his superior knowledge of medicine, not to coerce interns.

> I was with Hedge /¯intern¯/ and Goldsen /¯assistant resident¯/, who were examining an old woman admitted to the hospital with chest pains. Hedge listened to chest sounds. He said: "A funny murmur." Goldson listened and said: "No, it's not what you think it is." He and Hedge discussed the sound. Finally Goldson said: "Okay, but I think when you get the cardiogram and a consult, you'll see that I'm right."[49]

> I met Hedge on the ward, with the woman he had admitted a few days ago. I asked him who was right, he or Goldson. "Oh," he said, "Goldson was right. It wasn't what I thought. The AR can always teach you a thing or two. Now, he'll be hard to handle. He'll think he was right this time, so he has to be right next time. He knows what he wants done, but as long as the guy is reasonable, you can discuss it with him."[50]

The intern who disagrees with a resident is asserting his equality. He implies that he knows as much medicine as the resident does. A resident does not have to deny the intern's claim by telling him this is not so. His residency is adding to what he learned as an intern. His opinion is probably the more informed of the two, and he expects that this will be confirmed by the consulting physician. Since most differences of opinions are resolved in favor of residents, interns are reminded that they are still not equal, but inferior in knowledge. The residents can still teach them a thing or two they need to know. By tolerating differences of opinions and submitting them to a third party, residents do nothing to subvert an egalitarian relationship with interns, but they do replenish their abated power by demonstrating that they still have something to exchange.

The assistant resident superintends medical care. His responsibility is to oversee and coordinate such work as taking complete histories, doing thorough physical examinations, making diagnoses, and providing treatment. If an assistant resident can dictate a discharge summary indicating that everything that should have been done for the patients on his ward was done, he has done his job well. To discharge his responsibility, he must have the cooperation of interns who do the actual work. To gain and keep it, the resident tacitly agrees to provide interns with a variety of services.

> I was on the ward talking with Prentice [intern] when Harris [intern] motioned me over to tell me that Seeling, the new assistant resident, had called a meeting with the interns. "He's taking over the ward today," explained Harris, "and he wants to tell us how he's going to run it. Each AR has a little different idea of how things should be. Though they are our patients, he has the say." We met in the conference room on the third floor of the Peabody Building. "I just want to say a few things," Seeling told us. "If I wait until we all have the time to meet, it would never get done. I think making it a formal meeting gets it over with." Harris asked him if anybody arranged to get slides for the laboratory. "I would think," replied Seeling, "we should have no trouble get-

> ting supplies. I could always arrange in the past to get what was needed." "So," said Harris, "arrange already." Seeling made a note. "Sorry I'm late," said Prentice as he entered the room, "but I had to attend to some things." "Bullshit!" said Harris. "You were eating." "More shit," said Prentice, as he lay back on a bed in the room. "Wake me when this meeting is over," he said. Seeling asked if the students were coming to the meeting. "They have work to do," Harris told him. "I just want a few minutes," Seeling said, "to explain how I would like to run things. It will still be your ward, but I saw some things on the other service that I don't want repeated here. I think they can be avoided. First, I think it's best if we all do our own jobs. I will be running around to get things, and I want you to make sure things get done. That won't leave me much time to do my work. I have to write my notes so we know what we are doing when we go over the charts. If I don't do that when I should, I'll never get it done. I don't think we should have chart conferences every day. You know what you're doing. So, how about every other day?" Everyone agreed. "That'll give us more time to do our work," said Harris. "Also," said Seeling, "I'll try to work up every patient so I'm in touch with what you are doing. Okay?" "If you want to," replied Prentice, "that'll be good. Harry [the previous AR] was good that way. He would just jump in there with us. That would be great. I think it would be a big help." "Okay," said Seeling. "I don't know if I'll be able to work up every patient, but I will work up most. I don't want to be doing all the pneumonias, but I will do the more-than-routine patients. I won't make long notes. I'll make short comments on the charts. They are still your patients, but I do want to know what's going on. I'll also start rounds on the dot. If we start evening rounds at 5, there should be no reason why we shouldn't finish in time for you to have dinner. Any questions?" No one had questions.[51]

Interns resent the assistant resident who is late for evening rounds, since he may cause them to miss their evening meal.

They also resent a resident who does not work up patients. Many times they have two or more admissions at the same time and are unable to work up each one immediately. A willing assistant resident can make the admission process easier. Furthermore, interns think that the assistant resident cannot discuss patients unless he has worked them up himself. Interns on Seeling's ward, then, obviously appreciated his promises to them. He also promised that he would run around to make sure that things got done. The assistant resident can do many things to help interns:

> I met Huptman /¯assistant resident¯/ at the elevator. He was carrying a patient chart. When I asked him whose chart it was, he said: "I've just got this chart by real devious and complicated means. The patient was admitted, but no one knew he had previously been a patient. We had no records for him, though he insisted he had been there before. I went over to records and found out he had been at the outpatient department. His chart was being held up for insurance reasons. I ran down and got it away from them." He and I rode the elevator up to the ward. We entered the laboratory and Huptman handed the chart to Eliot /¯intern¯/. "Where," exclaimed Eliot, did you get this? This is a real pearl," he told me. "I can really use this." "It's all in knowing how," said Huptman.[52]

> I was running to the wards with Booth /¯assistant resident¯/. We were in the House Officer's Building when he got a telephone call from Kaufmann /¯intern¯/, asking for help. It was late at night, and as we passed the mailboxes we saw Harris /¯intern who was the night float¯/ stuffing consult requests in the boxes. "What's up?" he asked. "I thought I'd get this out of the way early." Booth told him that Kaufmann had more than he could handle. "Why don't you," he asked, "go over and give him a hand? The two of you can probably handle things on

> the ward. I'm going over to pick up a patient of his, the MI that just came in. I'll take care of her for him, and you can help him with the other admissions." Later, I was with Kaufmann. "Thank God," he said. "He'll keep an eye on her. Having a float is a big help, but a good resident is a godsend. He can always be of help. They don't have to do all they do, but residents always seem to be right guys. If you honestly try to do your job and they know you are, you can expect help."[53]

Residents do not have to do these favors but when they do, they place the interns in their debt. Interns do appreciate what residents do for them:

> "The assistant residents," Koren /‾intern‾/ told me, "are usually available and always ready to be of help. They share their experience and are also willing to do things for you. A resident, for example, might run down with a requisition you didn't have time to deliver or pick up some pictures for you. They do things like that for you. So I have no complaints about residents. They have always been around and been a great help. Know what else? Not one of them has taken advantage by pushing his own ideas, his own way of doing things on me. They also share what they read with me. It's been a good relationship."[54]

As these comments suggest, assistant residents do the reading that interns do not have the time to do:

> Hertman /‾intern‾/ entered the laboratory. Goldson asked how Mrs. Jones, Hertman's patient, was doing. "Not bad," said Hertman. "That article I mentioned to you," Goldson said, "is on the desk. You want to read it. It's only a couple of pages long, but I outlined the clinical part. It's only about a page and won't take too long to read." Hertman thanked him. "Hey," said Kaufmann, "I want to read it too."[55]

In addition to finding articles that are pertinent, assistant residents also share their knowledge of the literature on the wards:

> "The library here doesn't mean anything to me, because I don't get a chance to read that much. You have to have time to read. Who has time? I have too much to do to take the time to read everything written about a problem one of my patients has. Now and then I'll look at an article or read a journal. But most of the time I depend on other people. I depend a lot on the assistant resident and other people like the visit to keep me up on the medical literature."[56]

Interns believe that everybody who can keep up with medical literature, therefore, they don't hesitate to ask residents to keep them informed:

> We were making rounds. The first patient was an epileptic. After Prentice [intern] examined him, he turned to Mayer [assistant resident] and asked: "What's in the literature? Anything I should know?" "I have an article on the treatment of epilepsy," said Mayer. Prentice asked to borrow it. "Sure," said Mayer, "but the authors don't say anything about this kind of seizure." "Good," said Prentice, "then I don't have to read it." We moved on to the next patient, a diabetic. Harris [intern] examined this patient. When he finished, he asked: "How about the diabetic literature? You must be up on the studies." "I have a couple at home," said Mayer, "and there is one real good article, but I don't remember the exact title. The studies are inconclusive, because it's difficult to maintain controls. You can't control on enzyme differences, types of patients, and things like that." The senior resident nodded. "I'll bring the article in but it may not be of much help to you."[57]

One final circumstance serves to maintain the relationship between intern and resident as social exchange. After the middle of the year, interns are looking back on the internship and forward to their residencies. Most of them will stay on at the hospital and assume the positions now occupied by assistant residents. Thus it behooves them to acknowledge that the ward is the responsibility of the resident and that interns must cooperate with him. In the interest of future gain, they accept the principles that support the positions of assistant residents. To do otherwise would be to subvert power that will soon be theirs.

The Social Structure of the Harvard Medical Services

A hospital is usually thought of as a hierarchy, with rules defining the rights, obligations, and duties of each position. The various positions are also assumed to carry differential status and power. If this were so, the intern, with the status of a physician, should have the power to implement the treatments he selects and to get the services he needs for patient care.

The rules at the Boston City Hospital, however, are vague. They do not set forth the rights and obligations of those who must work together to care for patients. Furthermore, the rules are not always binding. For example, the name of a patient should not be placed on the danger list unless his condition is truly serious. This is a rule. Because a telegram must be sent to the next of kin and a clergyman notified each time a patient is placed on the danger list, the hospital's administrators try to keep the list short to cut down on clerical work. But an intern can always get a porter to transport a patient whose name is on the danger list. Therefore, to expedite transportation, interns rather readily violate the rule - which they couldn't do without the complicity of residents and nurses. The rules for obtaining other services can just as easily be circumvented, with the tacit approval of nurses, clerks, and technicians. Hospital rules are less important than a shared understanding of how things should be done.

The social structure of the Harvard Medical Services is the network of relationships negotiated and established as social exchange. What I have said about the Boston City Hospital does not imply that the situation there is atypical. On the contrary, in my opinion. Nevertheless, the hospital and the medical services cannot be explained in terms of a conventional power structure. The Boston City Hospital must be examined as a locale where personnel, mostly but not exclusively professionals, are enmeshed in a negotiative process by which they accomplish their ends and the stated purpose of the institution.[58]

The diplomacy, bargaining, and improvisation I observed could, of course, be attributed to unique conditions at Boston City. This hospital is operated under the auspices of the city. Most others are not. Three medical schools share its facilities, though such sharing is uncommon. The hospital is old and dilapidated. The shortage of nurses and other paramedical personnel is more serious here than at other hospitals, particularly teaching institutions. All of these conditions may call for somewhat devious dealings. My contention, however, is that bargaining is typical of the relationships among hospital personnel anywhere, and that diplomacy and improvisation are simply part of social exchange.

Studies of other hospitals support this position. Sociologists who studied the Michael Reese Hospital,[59] for example, suggested that an approach emphasizing negotiation would be useful because it directs attention to exchanges among personnel as well as to hierarchical prescriptions of rights, obligations, and duties. This is just the approach I have taken at the Boston City Hospital.

FOOTNOTES

1. The "rudimentary structure" consists of informal relationships and unofficial norms, which are evolved within the formal organization of the medical setting. For a further discussion of "rudimentary structure," see Blau, *op.cit.*, pp. 92-93.

2. Social structure in these terms is also discussed by William J. Goode, "A Theory of Role Strain," *American Sociological Review*, 25, 4 (August, 1960) particularly pp. 494-495.

3. The government agencies observed by Peter M. Blau are other examples of structures consisting of negotiated social relationships. See *The Dynamics of Bureaucracy* (Chicago: University of Chicago Press, 1955).

4. June 11, 1965.

5. July 28, 1964.

6. May 24, 1965.

7. June 21, 1965.

8. July 3, 1964 and July 27, 1964.

9. July 8, 1965.

10. July 17, 1964.

11. July 4, 1964.

12. October 21, 1964.

13. August 21, 1964.

14. July 3, 1964.

15. October 21, 1964.

16. April 19, 1965.

17. December 23, 1964.

18. May 25, 1965.

19. July 29, 1964.

20. April 13, 1965.

21. January 20, 1965.

22. January 20, 1965.

23. Intern.

24. April 19, 1965.

25. July 23, 1964.

26. September 30, 1964.

27. July 31, 1964.

28. May 3, 1965.

29. April 19, 1965.

30. April 7, 1965.

31. June 2, 1965.

32. Blau, *op. cit.*, p. 132.

33. June 29, 1965.

34. July 8, 1964.

35. June 29, 1965.

36. See Blau, *op. cit.*, p. 135.

37. July 1, 1964, and June 29, 1964.

38. January 6, 1965.

39. July 21, 1964.

40. June 21, 1965.

41. June 29, 1965.

42. July 17, 1964.

43. April 4, 1965.

44. December 2, 1964.

45. August 5, 1964.

46. May 25, 1965

47. December 1, 1964.

48. June 2, 1965.

49. June 3, 1964.

50. June 7, 1964.

51. April 19, 1965.

52. June 29, 1965.

53. January 7, 1965.

54. June 11, 1965.

55. May 3, 1965.

56. December 23, 1964.

57. July 17, 1964.

58. See Anselm Strauss, *et al*., "The Hospital and Its Negotiated Order," in *The Hospital in Modern Society*, Eliot Freidson, ed., (Glencoe, Ill.: The Free Press, 1963) p. 167.

59. Strauss, *et al*., *op*. *cit*.

CHAPTER 9.

IS AN ELITE INTERNSHIP DIFFERENT?

At BCH I heard repeatedly that things were different at other hospitals. "Interns at other hospitals don't have the problems we do, and don't have to do as much as we do," Harvard interns told me. Since I had no comparative data on other hospitals, I arranged to spend a few weeks at a general hospital in a Boston suburb.

My first visit to the suburban hospital startled me after my year at BCH. This hospital was not old nor in obvious need of repair. The equipment was modern. There were many nurses on the wards. The first day I spent with an intern further convinced me that this was certainly a different medical setting. When I learned that interns had no trouble getting clean uniforms, I recalled all the times I had wandered around the Boston City Hospital with interns in search of laundry. When I asked the intern how much laboratory work he had to do, he said, "I don't do any, because the lab people do everything for me." When we visited a patient, we entered a room in which there were only four patients, but five nurses. Also, the intern I was with left the hospital to have lunch with his family.

My first few days at the general hospital consisted almost entirely in making these sorts of comparisons. As I spent more time with the interns, however, I found that they were doing very many of the same things as interns on the Harvard Medical Services. The settings were different, but I actually saw no startling differences in the work.

Like the Harvard internship at BCH, this program emphasized "learning by doing." Interns at both hospitals were expected to make work rounds with a resident twice daily; were responsible for working up patients; and were charged with day-to-day patient care. At both hospitals interns rotated through the outpatient department, the admitting floor, and the emergency ward.

Since the data I had collected by participant observation did not tell me whether there were real differences between the two groups, I decided to make more precise measures. Therefore I conducted a time study of the activity of three interns randomly selected from each group. The following data and interpretations are based on the results of that study.

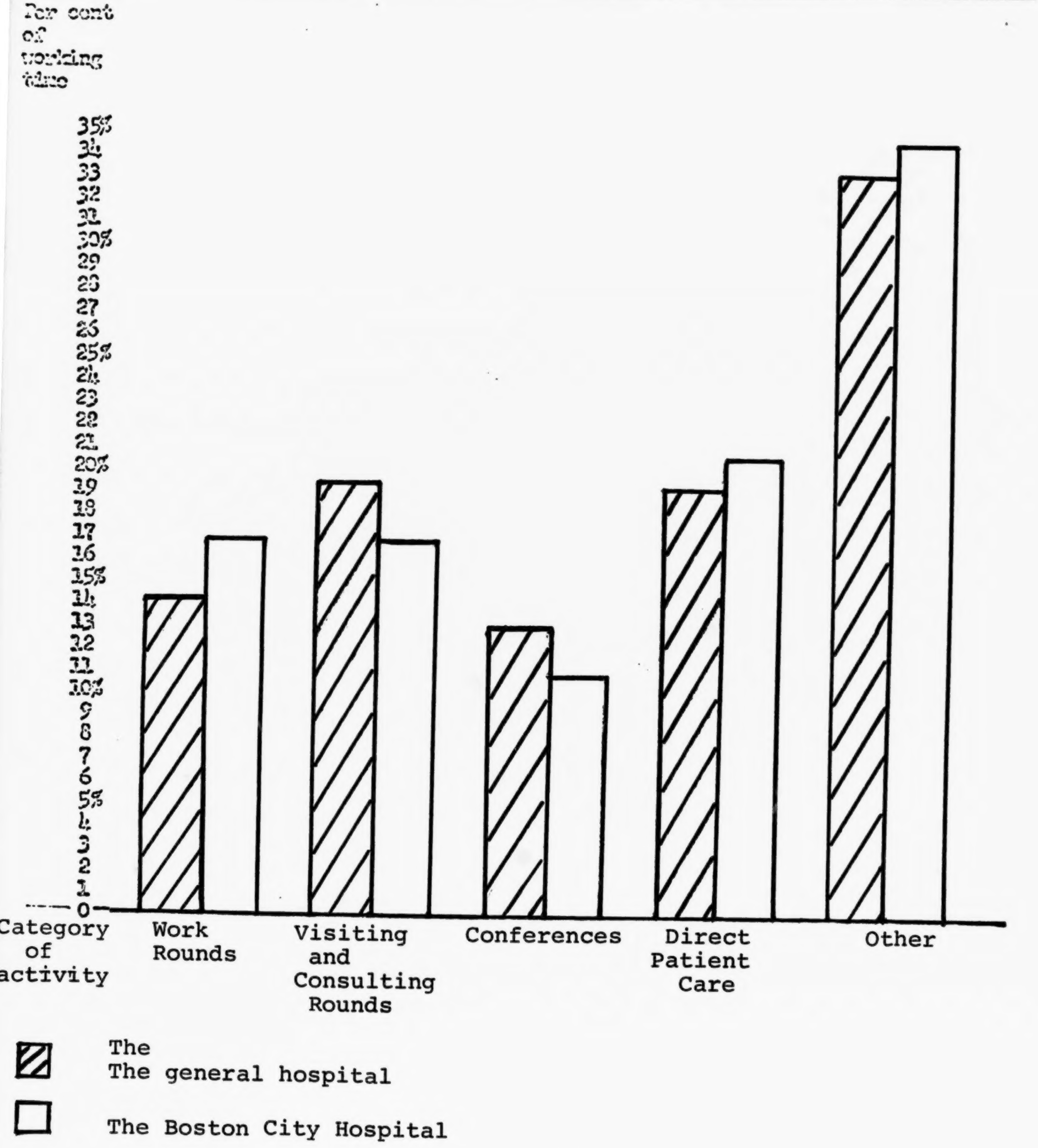
I recruited and trained a number of my students to record intern activity. Three of these were in the Graduate Training Program in the Social Organization of Medical Care. All had some experience in a variety of medical settings. The training, which took place a few weeks before they went into the field to collect data, stressed accuracy of recording and agreement on the kinds of tasks to be assigned to each category of activity. Each student spent five days with a different intern at each hospital, recording the time the intern spent on each kind of activity.

Other studies have determined that a period of five consecutive days affords a reliable sample.[1] Since weekends were in no way special at either hospital, the data are based on the period from Monday through Friday. The observers' task was to record what each intern was doing at 30-minute intervals during the day, in terms of category of activity. They also wrote brief descriptions of the activity. For each intern studied a new series of observations was started every 30 minutes, so that half of each working hour was classified according to specific categories of activity. On the first day, observations started at 8:00 a.m. and progressed from 9:00 a.m., 10:00 a.m., and so on. On the next day they started at 8:30 a.m. and continued at 9:30 a.m., 10:30 a.m., and so on. If there was some regularly scheduled activity, such as a conference, observers watched interns only if they did not attend. Observers were rotated among interns so that each made observations of different interns at different times of the day.

The data represent the work of a 40-hour week at each hospital, excluding time spent on work rounds, visiting rounds, and other scheduled activity. The percent of time interns spent in scheduled activities is presented in Figure 1. Also presented is the percent of time spent on providing direct patient care and engaging in other activity. This is not to say that interns spend their time this way every single day, but on an average day, interns at both hospitals spent approximately 40 to 50 percent of their time making work rounds or attending some scheduled activity. The rest of their time, however, had to be further defined and analyzed before differences could be discerned between the groups.

The data in Figure 1 represent only the interns' work between 8:30 a.m. and 5:00 p.m. at the general hospital, and 8:00 a.m. and 5:00 p.m. at the Boston City Hospital. Evening and night work are omitted. The data cover the activity of interns when they are on their own, approximately 50 percent of the time. According to plan, a different three and a half hours of free time was sampled each day. Excluding regular activities, interns at the general hospital had 1170 minutes and those at BCH had 1350 minutes of free time. The schedule for observations, if followed exactly, would have resulted in our observing all the free time of interns at the general hospital and sampling 75 percent of that of BCH interns. It was not possible, however, to follow the schedule exactly, because interns were not always available when we wanted them, took ill, or left the hospital early. In the five days of observation, we were able to sample 82 percent of the free time of interns at the general hospital. We also adjusted the schedule to permit observation of interns who started work early, which resulted in an 88 percent sample of the free time of interns at BCH.[2]

When the data were analyzed, it was obvious that the three observers did not always agree on the category to which each task should be assigned. The fact that they were required to describe each task they observed made it possible to correct such discrepancies. When there was an inconsistency of this sort, I assigned the task to a category. Since interns sometimes performed several tasks simultaneously, it was not always possible to determine to the minute how much time they spent on each. The observations were limited to certain hours because interns were most accessible at those times. The comparison between groups, therefore, is obviously limited to their daytime activities. My students missed much of the flavor of the work at both hospitals because, as observers, they had the specific task of recording activity. They did not igure 1. Comparison between the daily activity of interns of the general hospital and that of interns at the Boston City Hospital



spend time with interns unless they were observing. The data presented in Figure 1 are also somewhat misleading. For example, they indicate that the two groups of interns spent approximately the same amount of time in academic activity. We know, though, that interns at BCH often decide to miss a conference in order to gain more time for other kinds of activity. Interns at the general hospital did the same when they were on ward rather than private services.

The following conversation illustrates the difference between the ward and private services:

> "I have a lot of time to read on the private service," the intern said, "and I can attend all the conferences and lectures. If I was still on service, I wouldn't be at today's conference. You have a lot more work to do on service. The patients are more sick, too. Now, on the private services, I admit them and it's up to their doctors to take care of them. I have to worry about this guy with the drips, but private patients aren't my worry. On the service wards you have a lot of responsibility, but you don't have it on the private side."[3]

Thus we see that, contrary to Figure 1, interns at the general hospital spend much more time on academic activity when they are assigned to the private services.

Though the general hospital used private as well as ward patients for teaching purposes, we observed the interns there only on the wards. The reason for this is, of course, that the BCH interns had no experience comparable to work on the private services.

The four categories of activity were (1) management of the medical setting; (2) exchange of information; (3) direct patient care; and (4) supplementary patient care. Each category is defined and discussed separately.

Management of the Medical Setting.

Interns at both hospitals engage in activities that are not patient care *per se*, but arrangement for facilities services that made it possible to take care of patients. These activities included obtaining necessary equipment, arranging for social services, collecting supplies, and similar tasks by which interns try to control the physical environment.

The observed management tasks may be further divided into five classes of activity:

(1) *Communication* on the ward consisted almost entirely of informing nurses of the condition of equipment, hazardous spills or objects, and the need for supplies, as well as requesting specimens, equipment, and changes in the patient area and ward conditions. The purpose of other communication was to inform attending physicians of patient requests, or to notify hospital authorities of changes in a patient's condition. Interns would, for example, inform social service of an imminent discharge or arrange to remove a patient's name from the danger list so as to avoid administrative problems

in discharging him.

(2) Telephoning is simply another method of communication, but we report it separately because we could quite accurately measure the time spent in this way. Interns used the telephone to solicit consultation or to arrange for some other service for a patient. The decision to consider time on the telephone a management task rather than some other kind of activity was arbitrary. Time on the telephone could also be considered exchange of information, but that category of activity had, by definition, been limited to discussion of the specific problems of particular patients.

(3) Locating Equipment refers not to requisitioning but to actually securing, conveying, and setting up equipment required for treatment or diagnosis. The category includes all tasks necessary to learn the location of equipment; travel time to get it and bring it to the ward; and returning it to its proper storage place.

(4) "Running around" includes all the interns' efforts to expedite their work. This colloquialism focuses attention on a critical category of activity. Locating equipment is a part of it but we reported separately the time spent in this way, since we could measure it very accurately. Running around includes going after patient records, taking specimens

to the laboratory or picking up laboratory tests, making trips to other hospital departments to schedule services for patients--in other words, all the tasks we usually think are done by non-professional employees.

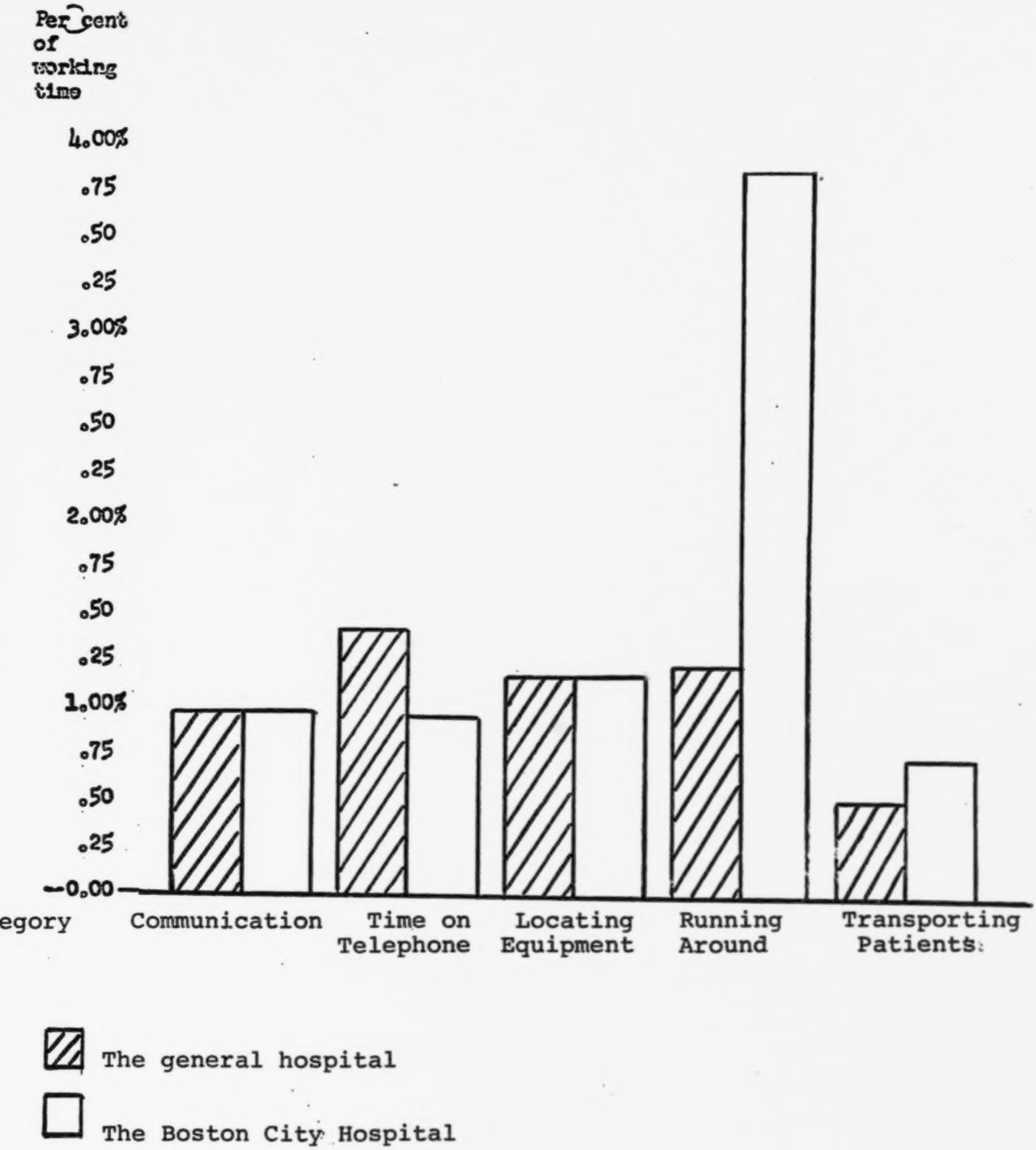
(5) Transporting patients is really more running around but again, since we could measure it accurately, and we reported it separately. Interns bring patients from the admitting floor to the ward. When there are no porters available, they may themselves transport their patients to another hospital department. Such things as getting patients out of bed and sitting in chairs we recorded as direct patient care.

Figure 2 shows the percent of their time interns at the two hospitals were observed to spend managing their respective medical settings. Although the data do reflect differences in activity, they are not presented as definitive profiles of how interns spend their time when managing their medical settings.

Interns at BCH spent almost twice as much time (8 percent) managing the medical setting as interns at the general hospital (5 percent). At the general hospital these activities cost the intern less than half an hour of his time each day, while at BCH an intern had to spend almost half again as much time in this way.

Interns at the two hospitals spent the same amount of

Figure 2. Comparison between the percent of time interns at the general hospital and interns at the Boston City Hospital spend on the management of their medical setting



time in communication and locating equipment. It is important to note that this communication had to do directly with the management of the medical setting. There was, of course, a great deal more communication among hospital personnel, and much more time was spent on the telephone discussing patients and their problems. Interns at BCH had to spend a few more minutes each day transporting patients, but the difference between hospitals does not appear to be significant. The important difference was in the amount of time interns spent running around the hospital: Interns at BCH were observed to spend almost half an hour each day in this way, as compared to a few minutes at the general hospital. In other words, interns at the Boston City Hospital do more for themselves to expedite their work. Most of what they do, however, is arranging for or obtaining the results of laboratory work.

A number of circumstances at the Boston City Hospital may explain this difference in activity. First, the hospital is not adequately staffed. Second, patients here may be sicker than those at the general hospital. If this were so, interns would want information as quickly as possible, which could explain their efforts to speed up laboratory work. Another possibility that must not be overlooked is that interns at a university-affiliated hospital may order more laboratory work than interns at a general hospital. Administrators at BCH often complained that the Harvard interns ordered more laboratory work than necessary; they attributed this to what they called the academic way of thinking. Interns at the general hospital, in fact, did no laboratory tests themselves, but we have no data on their actual use of the laboratories. Interns at BCH did spend four percent of their time running around, compared to one percent for interns at the general hospital.

Whatever the reasons, the fact does remain that interns at the Boston City Hospital spent significantly more time managing their medical setting than those in the comparison group. Allowing for the fact that medical records are harder to get at BCH, most of the variation can be accounted for by the amount of time Harvard interns spend arranging for or obtaining results from laboratories and the x-ray department.

Exchange of Information.

Most people at a hospital need to know the conditions of and services required by the patients. The exchange of information among these people is what permits the organization of patient care. All tasks that informed medical, nursing, and other personnel of a patient's condition were reported as exchange of information. The category was further broken down according to the type and purpose of the information exchanged.

The most obvious difference between the two hospitals in activity of this sort concerned the exchange of information for teaching purposes. Since there were no medical students at the general hospital, interns obviously spent no time talking with them. Interns at BCH, however, spend almost 5 percent of their time instructing medical students or exchanging information relevant to patient care. The other categories of information exchange were applicable at both hospitals:

(1) Exchange pertinent to diagnosis, including the evaluation of laboratory results and discussions with consulting physicians;

(2) Exchange pertinent to the choice of a treatment plan, particularly information relevant to the choice of a medical procedure;

(3) Reporting a patient's condition to other physicians;

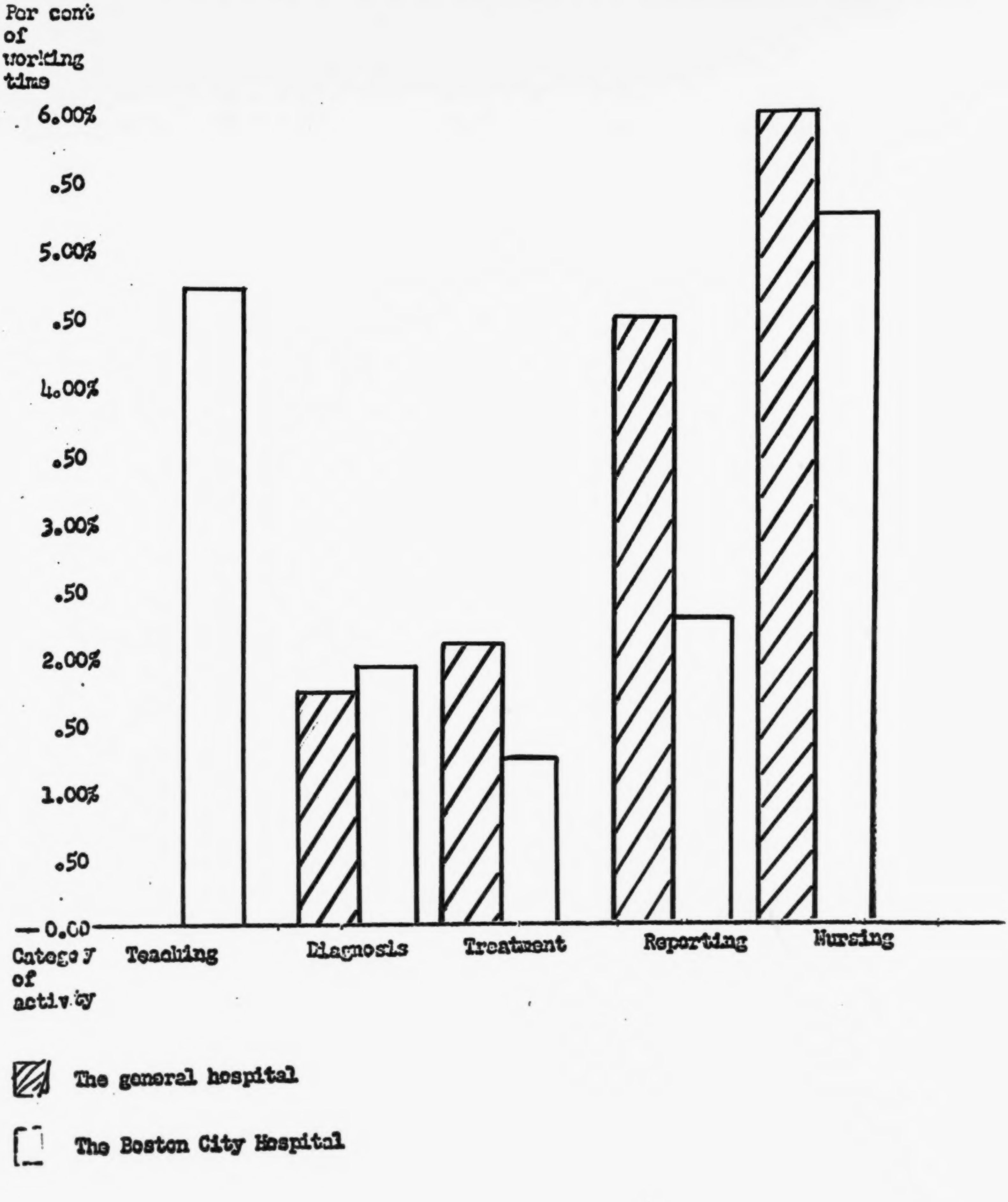
(4) Informing nursing personnel of changes in a patient's condition or of new orders concerning medication or treatments. This includes verbal communication only, not charting or writing orders.

Figure 3 depicts the amount of time interns at the two hospitals were observed to spend in information exchange. These data do not include information exchange at regularly scheduled meetings, such as visiting rounds, work rounds, or conferences. This catetory, like the others, covers only unscheduled time.

Harvard interns spent more time (16 percent) exchanging information than their general hospital counterparts (10 percent). When the times are corrected to take into account the teaching function of the Harvard interns, however, the difference all but vanishes.

While the differences in time spent exchanging information may not be significant, there is one interesting difference in the kinds of information exchanged. Interns at the two hospitals spent almost the same amount of time conversing with nurses and discussing diagnosis and treatment, but those at BCH did spent much less time reporting the condition and progress of their patients to other physicians. Whereas the BCH interns often reported to the residents, those at the general hospital were more often questioned by physicians. The residents at both hospitals were responsible for the administration of the wards, but interns at the general hospital appeared to defer more often to the visiting physician. Residents at the general hospital were, of course, active in discussions about diagnosis and treatment, but day-to-day patient care appeared to be more under the supervision of staff physicians, who made many, if not most, of the medical

Figure 3. Comparison between the percent of time interns at the general hospital and interns at the Boston City Hospital spend on the exchange of information



decisions. At BCH the intern and his resident themselves made decisions concerning diagnosis and treatment, often without discussing them with the visiting or any other physician. Physicians apparently supervised patient care more actively at the general hospital, which could explain why interns spent almost 5 percent of their time reporting to them. Interns at BCH spent 2 percent of their time in this way, usually with a consulting rather than a visiting physician.

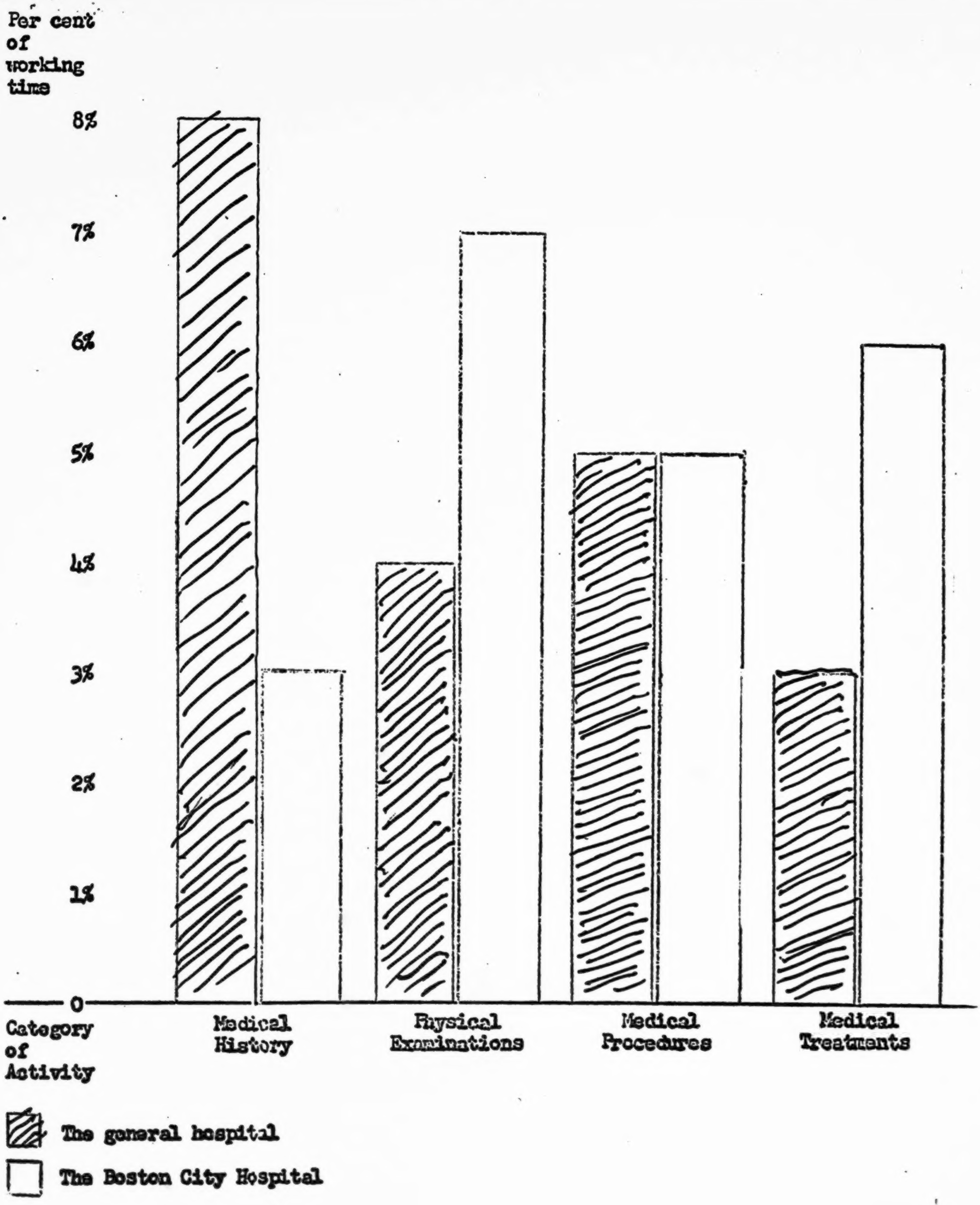
The data suggest that interns at the general hospital are closely supervised by staff physicians. Their medical responsibility is, in a sense, limited by the opinions of practicing physicians. Interns at BCH are limited less by the opinions of physicians than by those of residents, who are more like interns than like practicing physicians. The implications of such a difference for the experience of interns is an area that requires further study. The immediate implication, however, is that full-fledged physicians have less to say about medical care at the Boston City Hospital than at the general hospital.

Day-to-Day Patient Care

This general type of activity was divided into two subcategories. Direct patient care includes tasks done in the presence of the patient - taking medical histories, physical examinations, and performing diagnostic or continuous procedures, as well as carrying out required treatments. Supplementary patient care included all tasks necessary for the preparation or delivery of direct patient care. These things most often were done in the laboratory or at the nursing station on the ward. Together direct and supplementary patient care make up the bulk of an intern's work at both hospitals. Direct patient care - Interns at both hospitals spent approximately the same amount of time on direct patient care. There were differences, however, in the amount of time devoted to particular tasks. The breakdown is presented in Figure 4.

Working up a patient consists of taking a medical history and doing a physical examination. Interns at the two hospitals did not work up patients in the same way. Those at the general hospital spent more time taking histories and less time on physical examinations than those at BCH. Since it was difficult to classify questions asked of patients when they were being examined, we made the distinction purely on the basis of chronology. The time reported on taking a history represents only the time an intern spent questioning a patient before he began the actual physical examination, after which his time was recorded as examining, even though he continued to question the patient regarding complaints and symptoms.

Figure 4. Comparison between the per cent of time interns at the general hospital and interns at the Boston City Hospital spend on direct patient care.

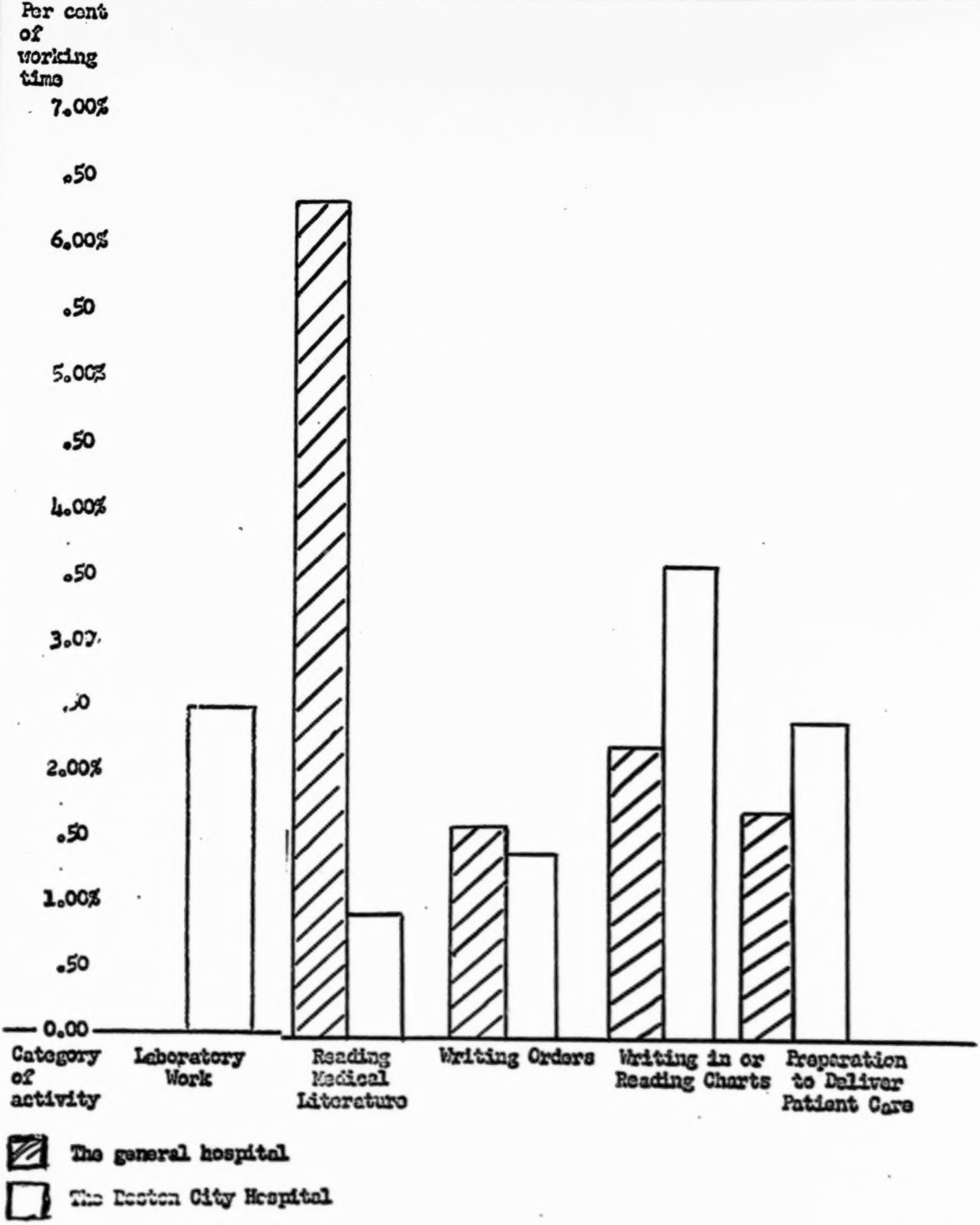


The BCH interns spent significantly less time taking a history before they began a physical examination. This difference may be explained in part by differences in the two hospitals' patient populations. Patients at the general hospital are middle-class usually admitted by a family physician, while those at BCH are lower-class, usually brought or coming to the hospital without having seen a physician. Many do not speak English; others may be senile or incoherent; still others simply do not communicate well, especially in medical terms. Thus the interns had to depend more on the results of their examinations.

Interns at the two hospitals were observed to spend the same amount of time on diagnostic procedures, including collecting and labeling specimens and positioning patients. The BCH interns, however, spent a good deal more of their time on such treatments as inhalation therapy, enemata, catheterizations, irrigations, dressings, and ambulation. They also spent more time checking to make sure that nurses were carrying out the ordered treatments. At the general hospital most of the treatments listed here were routinely delegated to nursing personnel. Much of this difference is, of course, attributable to the serious shortage of nurses at BCH.

Supplementary patient care - Interns at the two hospitals also spent approximately the same amount of time on supplementary patient care, though again with differences in what they did. First, as we have seen, interns at the general hospital did no laboratory work. At BCH interns were required to do all routine analyses of blood and urine, as well as some cultures and other laboratory tests. They spent more than 2 percent of their time in this way. Second, interns at the general hospital spent significantly more time than those at BCH in reading the medical literature. The data presented in Figure 5 would indicate that they do have time to read and still do their work, though they are on a service comparable to the Harvard Medical Services. Finally, interns at BCH spent more time charting and reading results of tests, observations, and notes about their patients. When questioned about this difference, one intern said, "You spend more time reading the charts because the residents write long notes, and you write long notes because the resident reads the charts." On the other hand, an intern at the general hospital said, "Everybody is writing in the charts. How much can you add to what the physician puts down or tells you to put down. I read the charts to bring myself up to date about patients after I have a day or two off." The patient charts at BCH appear to serve a purpose other than the intended one: They are a means of

Figure 5. Comparison between the per cent of times interns at the general hospital and interns at the Boston City Hospital spend on suplementary patient care.



communication and control between the intern and the resident. At the general hospital these are apparently achieved through direct reports to physicians.

Interns at the Boston City Hospital were also observed to spend more time preparing to give care to their patients. Since the time required to get equipment and medications was sometimes recorded here as well as under "Locating Equipment," it is impossible to say that there actually was a difference between the two groups in this preparation time.

The Difference Between "Good" and "the Best".

A cursory comparison of the activities of interns at the general hospital and those of Harvard interns at BCH would reveal no startling differences. They apparently spend the same relative amounts of time on many of the same kinds of activity. My time study of three randomly selected interns at each hospital does, however, indicate some important differences.

I have suggested before that serving an internship with an elite medical group is different from serving with a group that is merely good. The differences are not so much owing to the nature of the work itself as to the purposes of the two groups of physicians conducting the training programs. The fact that the primary purpose of the Harvard Medical Unit is research, not teaching, means that staff physicians are too busy with their own investigations to spend much time teaching. This means, in turn, that interns are taught by residents instead of full-fledged physicians. And interns have to teach medical students. The fact that BCH physicians delegated a great deal of their teaching responsibility was the most obvious difference between the two programs. Physicians at the general hospital were apparently more active teachers. A more subtle difference grows out of Harvard physicians' being less interested in routine patient care than physicians at the general hospital. Physicians at BCH delegated this responsibility to interns, assistant residents, and residents. At the general hospital the intern's experience is considerably different.

> I met Harrison on the private service and asked what he was going to do that afternoon. He said: "I have some procedures to do." I asked if these were on service or private patients. "They're things that the physicians want me to do for their patients." "Do you mean they're procedures they just left notes for you to do?" Harrison nodded and said: "Yes, they're things they want done for their patients here and some things I have to do on the ward side. I don't always see them, so they just write down what they want me to do." I asked him if he had any say in what was done for the patients. He said: "I can get in touch with the patient's doctor, but I don't usually do that. I don't get a great deal of responsibility for what's done on the private side. That's why I go over to the other side. I go over there because I get a lot of teaching over there." I remarked that it looked like he had a great deal of free time on the private side. "Yes, on this side you get a chance to read and do a lot of other things. You don't have these chances on the other side." I asked why that was so. "With the ward patients,

> you have some responsibility. You have to decide what needs to be done and see that it gets done. I guess, in a way, you're more the doctor over there. Over here, the patients have their own doctors." We started to walk off when he stopped as if he remembered something and returned to one of the rooms. I waited for him. When he returned he said: "There was a patient I had to see. There were just one or two things her doctor wanted to know, and he asked me to find out for him. She's just in for a general looking-over, and there were some things her doctor wanted to be sure of. They keep an eye on what you're doing for their patients."[4]

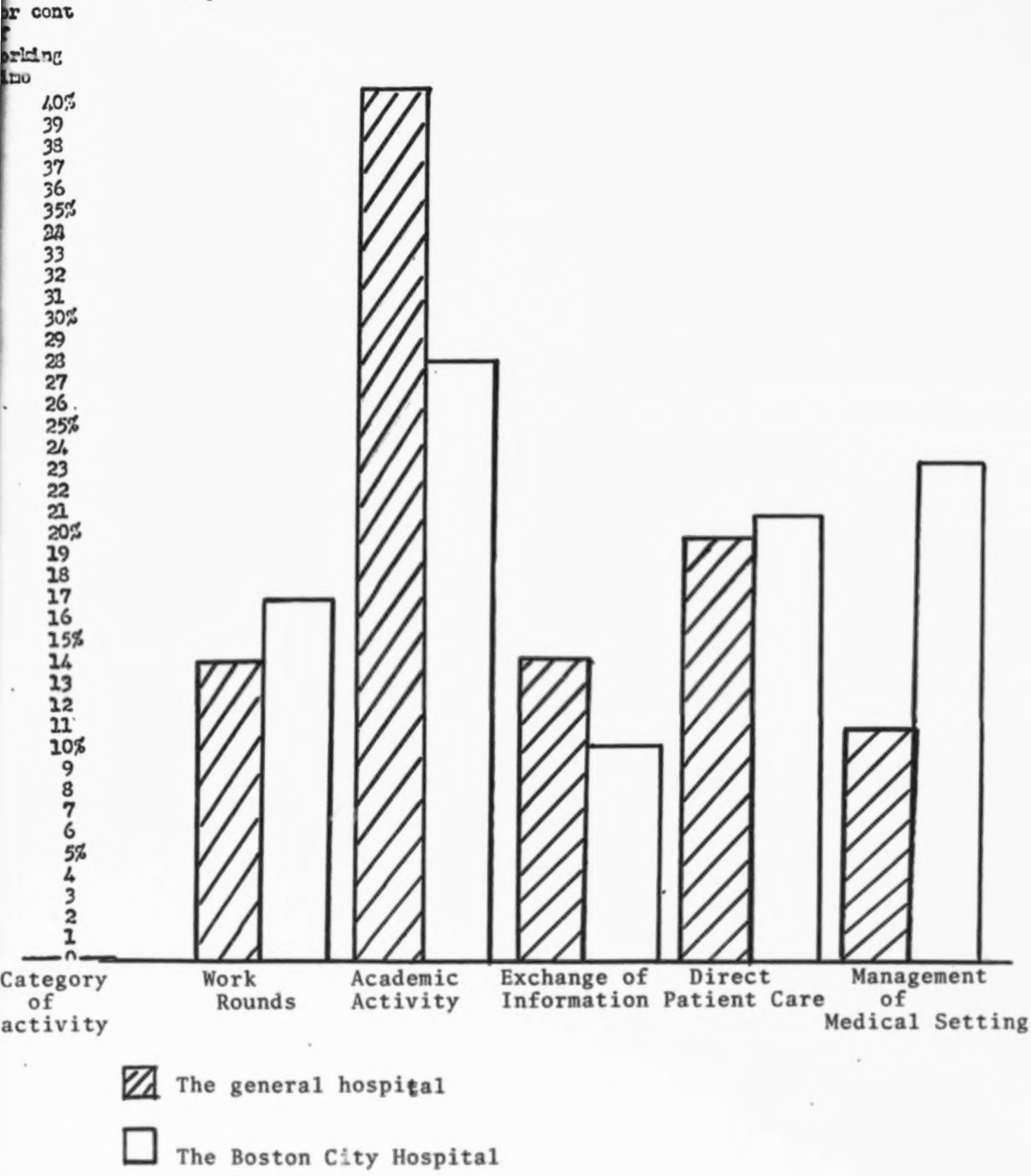
An intern at the general hospital is less his own man than the Harvard interns. Physicians tell him to do, whereas, the intern at BCH is responsible for patient care all year.

Interns at the general hospital spent a great deal more time with the physicians assigned to the service. The physicians assigned to teach also exercised their responsibility for patient care. They required interns to report and consult with them, even on the ward services (See Figure 3). There is no doubt that interns at the two hospitals received advice and direction regarding patient care from two different sources. The Harvard interns were supervised and taught by residents, not by physicians. The Harvard physicians discovered the exercise of responsibility as a way to control the situation. They maintained the viability of their medical services by delegating authority to interns, rather than by exercising it as the general hospital physicians did. By maximizing the interns' responsibility, the Harvard Medical

Unit could provide patient care without interfering with its essential purpose, research.

When considering the social organization of the Harvard Medical Unit one cannot help being impressed by the way it operates. First, there is the way students, interns, and residents are used to prepare one another for the work they have to do if the organization is to persist. The absence of a similar process of succession at the general hospital requires that interns learn the ropes from physicians. This gives physicians another opportunity to control what interns will do. Then there is the delegation of responsibility to young men who are only too anxious to have it. The fact that they have the responsibility, however, also requires the BCH interns to spend more of their time managing the medical setting. Medical school has prepared most interns to manage their patients medically, but Harvard interns are called on to develop other managerial skills. A further comparison of the daily activity of interns at the two hospitals is presented in Figure 6, which reveals that Harvard interns spend approximately 24 percent of their time managing their medical setting and doing teaching and laboratory work usually handled by physicians or technicians. Interns at the general hospital spend 11 percent of their time in this way. Interns at the general hospital spend

Figure 6. Revised comparison between the daily activity of interns at the general hospital and that of interns at the Boston City Hospital.



almost 40 percent of their time in academic activity, at which the Harvard interns spend 28 percent. These differences may also be attributed to the differential responsibility delegated to the interns. Those who are more preoccupied with patient care have less time to read. The way in which the Harvard Medical Unit maintains itself as an elite segment may, some would say, conflict with the educational goals of interns. By making so much of the work of an internship managerial, the Harvard physicians preclude the interns' participation in academic activity. Many physicians would argue, however, that an internship of this sort is more valuable because of the responsibility it offers. This, of course, results in practical experience, which is the purpose of an internship. If the idea of responsibility, which is so highly valued in medical education, is taken as the criterion, then interns at the general hospital may have a less valuable experience than those at BCH.

The responsibility we are talking about is not only for diagnosis and treatment, but also for the management of the medical setting. The experience of the Harvard interns may or may not be necessary to prepare young men for careers in medicine. There may be such a thing as too much responsibility. The Harvard internship program does apparently serve the straightforward purpose of providing the first responsibility young men have for the welfare of patients. It also serves, however, to reduce teaching demands on Harvard physicians and allows them to divest themselves of routine patient care so they can do research. No matter what other purpose the Harvard internships serve, they provide a way to delegate responsibility that could interfere with the research necessary to maintain the Harvard Medical Unit as a segment of the medical elite.

FOOTNOTES

1. The observation procedures were similar to those suggested by Margaret G. Arnstein, How to Study Nursing Activities in a Patient Unit (Washington, D.C.: U. S. Government Printing Office, 1954). I had previously employed similar procedures. See Stephen J. Miller and W. D. Bryant, A Division of Nursing Labor (Kansas City, Mo.: Smith Grieves Co., 1965).

2. The intern's free time was computed as the amount of time he spent at the hospital, less the time he participated in scheduled activity. Interns spent, on the average, 2250 minutes per week at the general hospital, of which 1080 minutes were scheduled. Of the remaining 1170 minutes, 955, or 82 percent, was observed and classified according to categories of activities. Interns spent 2550 minutes at the Boston City Hospital, 1200 scheduled. Of the remaining 1350 minutes, 1185, or 88 percent, was observed and classified. The data reported in this chapter were computed from these samples of activity.

3. March 8, 1965.

4. March 16, 1965.

Chapter 10

PROBLEMS AND PROSPECTS OF MEDICAL EDUCATION

The kind and quality of a society's medical care depends on the education of its physicians. Recognition of this axiom has led to numerous studies of undergraduate medical education, which have shed considerable light on the medical school and its role in training physicians. But graduate medical education has not recieved sufficient attention. The internship has been examined only incidentally, though it is a necessary part of a young doctor's preparation. My study has provided much needed descriptive data on the experiences of candidates for medical careers during this mandatory year. I have described the Harvard internships as I observed them and as interns at the Boston City Hospital explained them to me.

The original purpose of the internship was to provide young physicians with their first clinical experience and their first supervised responsibility for patients. It was intended to be an apprenticeship, during which cnadidates for medical careers learned from experienced physicians the attitudes, skills, and practices required by their profession.

Many medical educators are now questioning these aims. They have decided that the purpose of an internship are no longer clear, and that the experience is not adequate final preparation for independent practice. My observations support these opinions. The Harvard internship was not the young physician's first practical experience with patients; this had come in medical school, where third-or-fourth year students serve a clinical clerkship. The Harvard internship is not a true apprenticeship.

Direct supervision and instruction come not from practiced physicians, but from residents with only a year or two more experience than the intern themselves. Finally, the Harvard internship is not sufficient preparation. The typical medical career is now a specialty, and all the Harvard interns I observed planned to get additional training by serving residencies. The internship was only the first of many years of graduate medical education.

I do not suggest that the intern's experiences did not improve their clinical judgment; their competence did improve (See Appendix I). But in the experience it offers, the Harvard internship does overlap both the clinical clerkship and the residency. Next year, as an assistant resident, the intern can look forward to more of the same. The difference is mainly that the assistant resident is no longer responsible for specific patients, and he is less bogged down in menial tasks. There are, of course, other differences. Besides serving on wards, assistant residents rotate among several services and specialty clinics. But both the intern and the assistant resident handle episodic and acute medical problems. There is no apparent advantage to serving an internship before an assist-and residency, unless the mere performance of routine chores has great educational values.

Though the internship apparently no longer serves the purposes for which it was established, internship programs are an integral part of the structure of American medicine. The distinction between undergraduate and graduate medical education was the logical result of the 1910 report by Abraham Flexner.[2] After investigating the state of medical education at that time, he recommended that medical schools be affiliated with universities and that they establish a scientific curriculm. When that recommendation was implemented, hospitals were left to provide practical experience. Since the Flexner report, clinical experience with and responsibility for the care of hospitalized patients has constituted graduate medical education. Hospitals were eager to assume the responsibility. A hospital alwyas needs additional medical staff, and interns and residents supplement the efforts of staff physicians. The Boston City Hospital relies for patient care almost entirely on graduate trainess. Ostensibly training programs, internships and residencies are actually staff positions that must be filled if hospitals are to function adequately. Hospitals have become partners with medical schools in the traning of physicians, and must continue the partnership to maintain their own viability.

In an effort further to improve medical care, many hospitals requested medical schools actually to operate medical services. The school took on the responsibility for the administration and quality of patient care, while the hospital assumed the operating cost. The Second and Fourth Medical Services owe their existence to just such an arrangement between the Harvard Medical School and the Boston City Hospital. These marriages are attractive because they permit medical schools to establish, at little cost, programs of graduate education. The university-affiliated medical service also provides a setting for clinical research. Since the end of World War II, a great deal of money has been available for medical research, and, most of it has gone to clinical investigators at medical schools. "With the war over and the example of the atomic bomb before Congress to prove that American science, if given enough money, could accomplish anything," explained William B. Castle of the Harvard Medical School, "a golden rain began to water the growth of medical research as never before." The university affiliated medical service assured investigators of facilities and a patient population adequate in size and variety to support research programs. But, since the actual management of a medical service often interferes with clinical studies, a medical school can maintain its hospital-based research program only by recruiting interns to provide routine patient care and residents to administer the medical service the school has contracted to operate.

Internships thus serve too important a function for the hospital to eliminate them, even though they fall short of their purpose, and interns do not always consider what they learn worth the time they spend.[3] Many members of the medical professsion may disagree and others have been slow to recognize the fact, but internships have become the means of staffing research and teaching hospitals.

Much like the glamour technological industries, medicine has succumbed to grants economy. The growth of the university-hospital type of medical service has been in proportion to the money available to support medical research. Most such research has centered on basic biomedical studies of diseases. Of fundamental scientific importance, these studies were in the best tradition of the era of bacteriology and pathology. The university-hospital service has been essential to researchers because it is a source of patients with acute diseases that merit investigation. Therefore the goal of every medical school has been to establish a coterie of specialists conducting research at affiliated hospitals. The ones that have successfully managed this have become "name" schools, the models of excellence for others attempting to establish themselves as quality institutions.

The "name" schools of medicine also set the character of a great deal of graduate medical education. Many young physicians trained at these schools had no acquaintance with anything but the hospital-based, acute-disease oriented practice, which emphasized research as well as patient care. The Harvard Medical Unit is a model of that kind of practice. The internships I observed were the means by which the Harvard Unit maintained itself at the Boston City Hospital and recruited young physicians for the medical elite.

A decade or more ago, a study like mine would have focused on documenting the principles of education for the elite. There would, for example, have been a lot to say regarding the principle of preparing young physicians by introducing them only to the university-hospital type of medical service. My conclusion regarding the value of a university internship would also have been different, because the experience at BCH obviously does interest many young physicians in the practice of elite medicine. No matter what their original purposes, the Harvard internships do produce physicians who practice a very necessary kind of medicine, one that has advanced medical knowledge and brought many diseases under control. But the practice of medicine is changing, and I think it is less valuable to discuss what has been than what will be.

The 1960's have seen the emergence of a new understanding of the practice of medicine. Medicine of this era is characterized by concern with chronic rather than episodic, acute disease; with the quality of medical care; with the coordination of medical services; and with the interrelation of education, health, and welfare.[4] Medicine is not always responsive to the demands of the public it serves, but the public of today is better informed and its demands cannot be ignored. More people than ever before are over 65, and they are demanding continuing and comprehensive care. Others are demanding and able to meet the cost of regular, preventive, comprehensive care. Prepayment plans and health insurance programs have made this possible. The response to these public demands is changing the medical profession.[5]

Developments outside the medical profession are also influencing its practice. Many physicians are concerned that new government funding policies may reduce the amount of money available for the support of basic medical research.[6] The Office of Economic Opportunity, which was established to conduct the War on Poverty, is financing community health centers, a departure from the traditional delivery of medical care. Attentive to the problems of the poor and the rising cost of health services, Congress has made money available to water the growth of innovative systems of getting medical care to the people who need it. Medical care in the future will not be the exclusive responsibility of hospitals. There are now and will be more facilities that provide regular care to ambulatory patients and when necessary special care similar to that of hospitals. The community health center is an out-patient infirmary with some hospital beds for patients requiring continuing care. These facilities are becoming power centers, much as the university hospital and its services did in an earlier period.

There is a movement among young physicians to challenge the purposes of the traditional medical power centers. Its members include even graduates of "name" medical schools. This new breed of physician does not consider the practice of medicine to stop at the treatment of symptoms and the correction of pathological conditions. More and more, they are questioning the purposes of medicine as it exists and are proposing changes aimed at improving medical education, research, and practice. They argue that medicine should not be concerned with sickness alone but with health as well. They set for themselves the goal of preventing illness, rather than waiting for it to strike and then repairing its damages.

Although many young physicians are disillusioned with traditional medicine as they see it, they do not leave, but stay at medical schools. From positions in departments of preventive medicine they work to establish community health centers or other innovative means to deliver medical care. They try, whenever they can, to intervene in the affairs of medicine. There is no doubt that they have an impact on the practice of medicine and medical education. The Student Health Organization, established in 1965, has recently passed a resolution urging that departments of community and preventive medicine be elevated to the level of the traditional medical departments.[7]

Medical education is being evaluated, and efforts are under way to implement changes in keeping with the new understanding of medicine. The Western Reserve Medical School has attempted to involve students, interns, and residents with patient's financial and social, as well as their physical, problems. The Tufts University Medical School plans to rotate students, interns, and residents through the Columbia Point Health Center, which it operates in a public housing project. This plan is an obvious attempt to introduce young physicians to a model of medical practice other than the university medical service. The Tufts medical educators anticipate that such an experience will interest young physicians in community medicine. There is every reason to believe that community health centers will grow in influence and that departments of preventive medicine will have as much impact on medical education the traditional departments have had in the past. The Citizens Commission of Graduate Medical Education has already recommended that training programs should emphasize continuing, preventive, comprehensive care. It further purposes that graduate education not be limited to the university-hospital service, but that part of the time be spent in a comprehensive, continuing-care service.

Specialists at medical schools and university-affiliated hospitals have been the elite of American medicine. But reputation and power shift as conditions change, and conditions are changing in medical practice and education. A counter-elite comprising physicians interested in community medicine is attempting with some sucess to establish itself. The medical elite, therefore, faces a future of change.

The new understanding of medicine has advocates in Boston. John Knowles, M.D., Director of the Massachusetts General Hospital, has made statements criticizing the traditional organization of medical care. The dean of the Harvard Medical School pioneered some of the departures at Western Reserve. The merger of the Boston City Hospital and the Boston Health Department was apparently made in the spirit of the new understanding of medicine, since its purpose was to prevent duplication and to coordinate health services all over the City of Boston.

The emergence of the medicine has drawn battle lines between the various segments of Boston medicine. On the one hand, the medical elite are committed to the university-type medical service, emphasizing research and the management of episodic, acute disease, On the other hand, the counter-elite are committed to the concept of continuing and comprehensive medical care. The future of Boston medicine will be determined by the activities and tactics of these two opposing forces. The changes that have already occurred may swing the balance of power away from segments like the Harvard Medical Unit and toward those like the Tufts Department of Preventive Medicine. The medical elite may have changes forced on them, or, they may guide the direction of the new medicine.

This battle is only one in the war now going on within the medical profession. It is , in fact, not so much a battle as a difference of opinion about the purpose of medicine. The issues have been raised and will apparently be resolved in favor of the counter elite. If that happens, services like the Harvard Medical Unit will find it increasingly difficult to maintain themselves at the Boston City Hospital. They will be forced, at least, to change the character of their programs and to revise the internship. If they follow the recommendations of the Citizens Commission on Graduate Medical Education, they will have to abandon the internship as a separate and distinct program. This will make it difficult for them to maintain their present type of medical services, which they must have if they are to continue the clinical investigations on which their elite status has been based. The trends now evident in medical education will render the experiences of the Harvard interns as I have described them obsolete.

As a sociologist, I am not in a position to choose between the existing and the proposed organizations of medical education. My responsibility is to document the alternatives and to indicate which have a chance of acceptance and survival. No matter what my loyalities might be, in my opinion, the era of bacteriology and pathology is over. A new era is upon the medical profession, the era of community medicine. The present medical elite faces a future of diminishing influence. It has little chance of survival in its present form in a society that demands a new kind of medicine. The traditional academic segments could change their purpose and take the lead in imlementing the new medicine. In so doing they could make a contribution to the new medicine as great as the one they made to the old. But they must change if they are still to be accepted as the medical elite.

FOOTNOTES

1. The Graduate Education of Physicians (Chicago: American Medical Association, 1966).

2. Abraham Flexner, Medical Education in the United States and Canada, Bulletin No. 4, Carnegie Foundation for the Advancement of Teaching, New York, 1910.

3. "A year is too much," interns have told me. "You can learn what there is to know in six months, and after that it's just going thorugh the motions of patient care and may not be worth the time." A study conducted by the Bureau of Applied Social Research of Columbia University, reported by Patricia Kendall, indicates that only 25 per cent of interns and residents considered what they were learning to be worth the time they spent caring for patients. The Graduate Education of Physicians, op. cit., p. 59.

4. William P. Shepard and James G. Eoney, Jr., "The Teaching of Preventive Medicine in the United States," Milbank Memorial Fund Quarterly, XLII, 4 (October, 1964).

5. "The health and medical aspirations of the nation are largely determined outside of medicine, but it is within medicine that the means of achieving them must be created," states a report of the Citizens Commission on Graduate Medical Education, op. cit., p. 19

6. "Is Basic Research Threatened?" Medical World News, 7, 45 (December 2, 1966), pp. 108-119.

7. "What Ails Med Schools?" Newsweek (May 27, 1968), pp. 58 and 61.

APPENDIX I

THE PERFORMANCE OF HARVARD INTERNS ON PART III OF THE NATIONAL BOARDS

The National Board of Medical Examiners made available to me a number of tests devised to measure the degree and direction of change in medical knowledge and clinical ability. In 1964 15 Harvard interns at BCH took Part III Examination, administered by hospital physicians under special arrangement with the National Board. Seven months later 12 of those 15 took a parallel form of the same test. The data reported here are scores of these 12. The purpose is obviously to compare performance before and after the experience of the internship.

The Part III Examination consists of three separate tests. It requires a total of 6 hours and 30 minutes to complete.

Section A. (1 hour, 30 minutes) is a multiple-choice examination requiring interpretation of clinical data presented in a printed test booklet containing pictures illustrating the problems about which the questions are asked. The questions reflect the clinical and academic content of medical school.

Section B. (1 hour. 30 minutes), also a multiple-choice. uses motion-pictures to test acuity of observation and ability to draw proper conclusions. After watching film sequences of selected patients, the candidate is required to answer questions designed to evaluate his ability to note and interpret the observable signs.

Section C. (3 hours, 30 minutes), is a programmed testing technique in which questions are answered by erasure that uncover information or report the results of actions. This section which simulates actual clinical situations, is designed to measure clinical judgment in the management of patients. Interns were penalized for errors of omission (failure to select indicated actions) and of commission (selection of contraindicated actions).

The 1964 and 1965 scores for the 12 interns are presented in Tables 1 and 2. The analysis of the shift in scores is presented in Table 2. We made no distinction between interns on the Second and Fourth Medical Services, because the total number was too small to divide. Dividing the interns into two groups would increase the chance that increments in the mean score would not be significant because of the small number in each group.

The shifts in mean scores on each of the three sections and on the entire test were determined and tested for significance. The results are presented in Table 3. The shift was positive throughout. For Sections A and C the shift was statistically significant at .05; for the entire test, at .01. The increment in mean score for Section B was not significant because the shifts within the group varied so greatly. The standard deviation for Section B was significantly larger than for Sections A and C.

The results indicate that the internship experience significantly increased medical knowledge and clinical competence as measured by this particular test. We discerned no significant change, however, in their ability to note and interpret observable physicial signs. The individual variation in shifts on Section B indicates that this ability, as measured by the Part III Examination, depends on some unknown differences among the interns. We should note, though, that this variability can be attributed to the size of the increment in the scores of a few interns who, at the time the 1964 test was administered had not regularly attended patients on the wards. All other interns who took the 1964 test had spent at least a few weeks on the wards regularly caring for patients. The variation therefore may stem less from individual differences in acuity than from the fact that some interns had less experience than others in taking medical histories and working up patients. The implication is that the work on the wards may add more to an ability to note and interpret physicial signs than other kinds of work.

The test results also demonstrated that the performance of the 12 Harvard interns,was above that of National Board candidates in general. The 1964 performance figures for the Harvard interns were obtained at the beginning of their internships; those for the National Board candidates were obtained near the end of theirs. The Harvard interns at the outset performed at least as well as other young men further along in their training.

Though interns were told that the results of the Part III Examination would be used only for my purposes, they could have thought they would be used to evaluate them personally. It is not unlikely, then, that they were highly motivated to acheive on the examination administered in 1964. The test they took in 1965 was a regular administration by the National Board of Medical Examiners. A testing effect of the kind I have described would raise a question about the implications of the fact that the mean score of the Harvard interns was above that of candidates in general. Although, one could argue that the knowledge and ability of interns selected by Harvard was superior to those of medical school graduates in general, the impetus that the administration of the test as part of a research project may have had does not permit me to take that view. In other words, the high level of performance may have been as much, the result of the conditions under which the test was administered as of superior medical knowledge. The Harvard interns had, as a group, an above average knowledge of medical fact and clinical judgment. As they progressed in their training. they added to their knowledge and developed additional clinical competence.

APPENDIX II

Dear Doctor   :

For the past year, the house officers of the II & IV (Harvard) Medical Services at the Boston City Hospital have been assisting in a study of the internship. The research is sponsored by Brandeis University in collaboration with the Harvard Medical Services and the Harvard Medical School. The actual research is being conducted by Stephen J. Miller, who is independently supported by the United States Office of Education.

The purpose of the study is to gather information about the educational experience of house officers, particularly interns. This questionnaire is a part of that study. It is important that you, who will soon become a member of the house staff at Boston City Hospital, provide certain information which will be of help to the study. It is essential that you be objective in answering the questions.

The answers are confidential and you will in no way be personally judged on the basis of your answers to the questions. In fact, there are no right or wrong answers. Your answers are only important and meaningful as part of the overall response of house officers and will be seen only by the sociologist doing the research.

When completing the questionnaire, please feel free to explain your answer or make whatever comments you feel are necessary. Please, however, answer all of the questions.

Thank you for your anticipated cooperation.

Stephen J. Miller

1. How did you learn about the internship program at Boston City Hospital?

__________through listing of approved internships and residencies

__________from your medical advisor

__________from a member of your medical school faculty

__________from classmates at medical school

__________because you were a clinical clerk at BCH

__________other______________________________
(please specify)

(a) If you were told about BCH, how did the people who told you know about BCH.

(b) Do you know if any of your medical school faculty had been at BCH?

(c) Did you deliberately seek information about BCH? Yes_______ No_____
If you did, how did you go about it?

(d) If you did not solicit information about BCH, why not?

2. Did any particular person influence your decision to intern at BCH? For example:

______a friend or relative
______a classmate at medical school
______other, please specify.

(a) Were you advised to intern at BCH? Yes______No____
If you were advised, what was the advice?

(b) In general, on what did you base your decision to intern at BCH?

3. Now that you have decided to intern at BCH, do you have any doubts that this was the right decision?

Yes_____No_____

If "yes," what are the doubts?

4. What other programs did you consider?

Place	Type	Major Reasons for Considering That Program

5. What were some of the factors you thought important when selecting a place to intern? Did you take any of the following into account in applying to BCH?

(a) location? If "yes," please explain Yes_______No____

(b) responsibility? Yes_______No____

(c) patients? Yes_______No____

(d) teaching?

(e) facilities and working conditions? Yes_______No____

(f) professional contacts Yes_______No____

(g) prestige? Yes_______No____

(h) other? Please specify. Yes_______No____

6. What, in your opinion, are the advantages and disadvantages of the following types of internships?

	Advantages	Disadvantages
(a) rotating?		
(b) straight?		
(c) in a general hospital?		
(d) in a community or private hospital?		
(e) in a university hospital?		

7. What do you think you will be doing at the following times on a typical day as an intern at BCH?

AM

PM

Evening

Nights

8. How do you think you will be spending most of your time?

9. What do you think will take least of your time?

10. What do you know about Boston City Hospital? For example, what kind of patients will you be dealing with?

    (a) What is the teaching program like?

    (b) What are the facilities and working conditions like?

    (c) How much responsibility will you have?

    (d) How will your BCH experience help you with your future plans?

    (e) other information about BCH, please explain.

11. How much help do you think you will get from the following people?

	A Great Deal	Enough	Not Enough	Please make any comment?
Assistant Residents				
Senior Residents				
Visiting Physicians				
Consulting Physicians				
Chief-Of-Service				
Chief-of-Staff				
Medical Students				
Patients				
Other Interns				
Nursing Staff				
Social Service				
Lab and X-Ray, Personnel				
Others, please specify:				
________________				
________________				

12. If These People Will Be of Help?	What Will That Help Be?
Assistant Residents	
Senior Residents	
Visiting Physicians	
Consulting Physicians	
Chief-of-Service	
Chief-of-Staff	
Medical Students	
Patients	
Other Interns	
Nursing Staff	
Social Service	
Lab and X-ray Personnel	
Others, please specify: ______________________ ______________________	

13. Do you think you will be learning from the following people? If "yes," what do you think you will learn?

______Attending or Visiting Pysician Yes______No______

______Clinical Clerks (i.e.,medical students) Yes______No______

______Consulting Physicians Yes______No______

______Chief-of-Service Yes______No______

14. What do you think you should be learning during the intern year?

15. How important do you think it is to have time during an internship to read medical texts and journals?

important and absolutely necessary____________ important and necessary on occasion__________

important but not necessary____________ not too important______________

16. During the internship, will you have time to read? Yes____No____

If "yes," what will you fread? For examples:

general medical literature__________,specialty literature_______

non-medical literature__________.

17. If you have a couple of hours free, do you think you will most likely:

_____catch up on your reading?
_____catch up on your lab work?
_____spend time on the ward?
_____other, please specify?

18. In your opinion what makes a "good" intern? Please be specific.

19. What are your opinions of the importance of the following characteristics?

(a) extensive knowledge of medical facts?

(b) skill in dealing with patients?

(c) diagnostic skill?

(d) knowledge of therapy?

(e) ability to work with others?

(f) ability to organize work?

20. Which of the following activities do you think you will have responsibility for, and, over the year, will your responsibility be increased, stay about the same or decrease?

	IMMEDIATELY	MIDDLE OF YEAR	END OF YEAR
1. Admitting patients	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
2. Medical history and work-up on admission	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
3. Lab work, e.g., Gram stain, clotting time, etc.	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
4. Arranging for tests, consults, etc.	Yes__No__	Increased__Same__Decreased__	Increased__Same__Decreased__
5. Making a diagnosis	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
6. Treatments, emergency, e.g., shock, cardiac arrest	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
7. Procedures, e.g., starting infusions, catherization, etc.	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
8. Medication, deciding type and dosage	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
9. Writing orders	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
10. Keeping-up with medical literature	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
11. Medical management of patients	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
12. Ward work, e.g. checking and changing dressings, drawing blood, etc.	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
13. Presentation of case to attending or visiting physicians	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
14. Supervision of clinical clerks	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
15. Discharge of patients	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__
16. Critical decisions, for example,that a patient will benefit from or needs surgery.	Yes__ No__	Increased__Same__Decreased__	Increased__Same__Decreased__

21. If you will not be responsible for some of the activities listed, who do you think will?

Write the title, for example, "resident". of the person who you think will be responsible for the activity, if you are not.

	IMMEDIATELY	MIDDLE OF YEAR	END OF YEAR
1. Admitting patients			
2. Medical history and work-up			
3. Laboratory work			
4. Arranging for test. etc.			
5. Diagnosis			
6. Treatments, emergency			
7. Procedures			
8. Medication			
9. Writing orders			
10. Keeping-up with literature			
11. Management			
12. Ward work			
13. Presentation of case			
14. Supervision of clerks			
15. Discharge			

22. What do you think is an intern's responsibility toward medical students?

23. What do you think is the intern's responsibility to the patients?

24. Do you anticipate any adjustments you may have to make during your internship Yes______No_______

(a) If "yes," what kinds of adjustments?

(b) How difficult do you think it will be to make these adjustments?

25. What types of experiences during the intern year do you think will be most valuable?

26. What types of experiences during the intern year do you think will be least valuable?

27. How much time do you think you will spend in the following activities?

	A Great Deal of Time	A Good Deal of Time	Some But Not Too Much Time	Little If Any Time
Routine ward work e.g., drawing bloods. Changing dressings, etc.				
Conferences and Lectures				
Patient Care				
Working-up pts. and taking medical Histories				
Laboratory work, e.g., Gram's stain, Clotting time, etc.				
Work Rounds				
Attending or Visits Rounds				

Other, please specify.

____

____

(a) What is a great deal of time in hours?

(b) What is a little time in hours?

28. When, during the year, do you think each of the following people will be most important to you as an intern?

	Not Too Important	Immediately	Check the Time of the Year		All Year
			Middle	End	
Assistant Residents					
Senior Residents					
Visiting Physician					
Consulting Physician					
Chief-of-Service					
Chief-of-Staff					
Medical Students					
Patients					
Other Interns					
Nursing Staff					
Social Service					
Lab, x-ray, etc,. Personnel					
Other ________ ________					

29. Why will the following people be important to you during your year as an intern or will they?

(a) Assistant Residents?

(b) Senior Residents?

(c) Visiting Physicians?

(d) Medical Consults?

(e) Chief-of-Service?

(f) Chief-of-Staff?

(g) Medical Students?

(h) Patients?

(i) Other Interns?

(j) Nursing Staff?

(k) Social Service?

(l) Lab, x-ray, etc., personnel?

(m) Others? Please explain.

30. What changes do you expect will occur over the year in hour participation in the following activities?

    (a) Routine ward work, e.g., drawing bloods, changing dressings, etc.

    (b) Conferences and Lectures.

    (c) Patient care

    (d) Working up patients and taking medical histories.

    (e) Laboratory work, e.g., Gram's stain, clotting time, etc.

    (f) Work Rounds.

    (g) Attending or Visits Rounds.

    (h) Other, please specify.

31. What types of patients do you expect to see?

_______a wide variety of patients

_______mostly very sick patients

_______a sample of patients

_______other

Please explain your answer - that is, describe patient population.

32. (a) What types of patients would you prefer to see?

(b) Why?

(c) What will be the benefits of your contacts with patients?

33. Have you decided on what you will do immediately after your internship? Yes_________ No_____________

(a) Have you made any plans regarding your military obligation? Yes__________ No____________
If "yes," what plans have you made?

(b) Have you decided on the residency you will take?

Yes__________ No____________
If "yes," please specify

(c) Have you decided on a place to take your residency?

Yes___________ No_____________
If "yes," where__________________________________

(d) Do you know that you will be able to take this particular residency? Yes____________No____________

(e) If "yes," how and when did you know about this residency?

(f) Why do you want to take this particular residency?

(g) If you do not take this particular residency, do you have other plans?

34. What are your plans for the following years?

1966 First year after internship

1967 Second year after internship

1968 Third year after internship

1969 Fourth year after internship

1970 Fifth year after internship

35. In what type of professional activity do you plan to engage in after you complete your graduate medical education?

For examples:

________Medical practice

________A limited practice with a university affiliation

_______ A university teaching appointment

_______ A university research appointment

_______ Other, please explain

36. If you plan to practice, have you decided on the type of practice? Yes ___ No ___

For examples:

_____ a group practice

_____ a partnership with another physician

_____ a solo practice

_____ other, please explain:

(a) Would you seek a hospital appointment? Yes ___ No ___

Why?

(b) Would you want teaching privileges? Yes ___ No ___

37. No matter what your future plans, do you have a preference as to where you would like to locate? Yes ___ No ___

Where? ______________________________

Why?

38. What do you think would be a ideal medical career?

NAME ______________________ DATE OF BIRTH ____________

COLLEGE ____________________ MEDICAL SCHOOL ____________

5-0776

SUMMARY

THE EDUCATIONAL EXPERIENCE OF THE INTERN

Stephen J. Miller

Brandeis University
Waltham, Massachusetts

Cooperative Research Project No. 2596

April 10, 1964 to September 30, 1967.

BACKGROUND

The kind and quality of medicine that is practiced depends on the educational experiences had by physicians as medical students, interns, and residents. A recognition of the importance of the educational process in determining medical practice has resulted in numerous studies of undergraduate medical education. Those studies have provided considerable understanding of the medical school and its part in the training of physicians. But graduate medical education has not receive sufficient attention. The internship, for example, has received only incidental attention, though it is considered necessary to complete the preparation of young physicians for independent practice. The internship is a critical part of the educational process which shapes the medical careers that young physicians will have in medicine. There was a need for descriptive data on the experience of candidates for medical careers during the mandatory year they spend attending patients before they are considered full-fledged physicians. The report provides descriptive data on the intern year, identifying variables of the educational situation and explaining the implications of those variables for the future careers of physicians.

OBJECTIVES

The major objective was to describe and document the educational experience of interns on a university-hospital medical service. In addition, the following were specific objectives:

(1) To determine the reasons for selecting a university program of training rather than other training programs;

(2) To determine the types of activities and responsibilities had by interns at the hospital;

(3) To determine what the work of an internship is and how interns manage to do what they have to do at the hospital;

(4) To determine the critical problems of adjustment and learning that facilitate the successful completion of an internship;

(5) To determine the level and direction of interns' efforts and the implications of their relationships with others and the structure of the hospital for the level and direction of their effort;

(6) To determine how all hospital personnel organize their efforts and coordinate their activities to assure that the work that must be done is done at the hospital;

(7) To determine what the patterns of communication and relationships are between the intern and teaching physicians, consulting physicians, nurses, and other hospital personnel;

(8) To determine the importance of knowledge of hospital rules and regulation and interpersonal facility for the successful completion of an internship;

(9) To determine what kind of teaching is provided and who supervises the activities of interns;

(10) To determine if there is an increase in knowledge and clinical ability as well as an increase in the understanding of the application of medical knowledge to problems presented by patients.

PROCEDURE

The purpose of the project was to describe and document the experiences of interns by observing what they actually did on the Harvard Medical Services at the Boston City Hospital. The method adopted for the collection of data was participant observation. Simply, the investigator put on a white coat and participated in the activities of an internship. The investigator went where interns went and, whenever possible, did what they did. What was observed were the activities of interns and others on the wards, at clinics, and during conferences, lectures and meetings. A great deal of time was spent walking around and casually talking with interns as they worked. Frequently, a particular intern would be selected and his activities for an entire day would be recorded. In this way, it was possible to observe activities directly and ask on-the-spot questions about what interns did and why they did it.

Interns knew who the investigator was and what he was doing at the hospital. He accompanied interns for 18 months: observing the activities of a cohort completing an internship; observing a second cohort from the beginning to the end of an internship; and observing a third cohort beginning an internship. During that time, the investigator recorded specific activities and determined the categories of people with whom interns interact as well as the content of those interactions. As the investigator observed, he formulated hypotheses which were subsequently checked by further observation and direct questioning.

A brief period of three months was spent at a community hospital. The purpose was to obtain data which would permit preliminary comparisons between the Harvard interns and those at another hospital. The data was collected by participant observation. Also, a sampling of the activities of interns at the community hospital was conducted and the results of that were compared to a similar sampling of activities of interns at the Boston City Hospital.

Although most of the data were obtained by direct observation of interns in their work setting, a qeustionnaire was administered to the third cohort before they arrived at the hospital, and the second cohort were administered an objective test at the beginning and end of their year at the hospital. The National Board of Medical Examiners made available an examination to determine increments in knowledge and experience. The test that was administered duplicates, as well as any test can, the problems presented by patients to physicians.

RESULTS AND CONCLUSIONS

(1) The Harvard Medical Services is a port of entry for those who aspire to have a medical career which is some combination of patient care, teaching and research. Medical students who aspire to academic careers are advised by faculty members at their schools to serve an internship at the Harvard Medical Services or a similar medical service. The interns who came to the Harvard Services considered only 22 training programs to be important for the careers they wanted in medicine. Interns not only agreed that they wanted only straight medical internships but also agreed on what hospitals those internships should be served at; those were, university or university-affiliated hospitals.

(2) Only one intern aspired to a career of general practice. Of the other interns, 21% were preparing themselves for specialties, 65% were preparing themselves for careers of research and/or teaching, and less than 10% were undecided about what kinds of careers they wanted to have in medicine. This is not to say, however, that all these aspiring physicians knew exactly what it was that would constitute an academic medical career. That is, they did not know exactly what a career of research and/or teaching was but they did know that they did not want to be engaged in the traditional practice of medicine. By serving an internship like that offered by the Harvard Medical Services they gained access to routes to careers which would be alternatives to the independent, private practice of medicine.

(3) The work of an internship consists almost entirely of attending patients on the wards and clinics of the hospital. As an employee of the hospital, an intern must care for the patients assigned to him. Interns initially find themsel

in a situation in which there is a great deal of work to do. The initial perspective of an intern consists of a definition of the situation as one in which the is a lot to do and a goal to do it all. Interns faced with the work of an internship decide to do it all because this, they believe, to be medical responsibility. After interns have been at the hospital for a while, they realize that it is impossible to do it all. As interns become more and more involved with the care of patients, they conclude that what they have to do for patients is relatively more important than conferences, lectures, and meetings. They absent themselves from academic activities whenever those activities conflict with what they must do for patients.

(4) The initial perspective may be summarized as follows:

a) An internship consists of an almost overwhelming amount of work — academic activities as well as activities related to the welfare of patients;

b) Although everything is obviously not an educational experience, it is the responsibility of an intern to do it all;

c) Responsibility is not only medical responsibility in the traditional sense but responsibility for doing all the tasks patients require as well as participating in academic activities;

d) If an intern is not doing everything, he must find a way to do it all.

(5) Since interns have too much to do, they finally exclude almost all activities but those which are related to the welfare of patients. The implication is that an internship is nothing more than a lot of hard and dirty work. An internship may be nothing more than that, but interns cannot accept such a definition of their educational experience. If they were to do so, they would be denying the educational benefits of serving an internship. Interns think of medicine as a body

of knowledge that they must learn. Their efforts must be directed as much toward learning as toward doing their work. When it becomes obvious, however, that it is not possible to learn from the formal academic activities and do the work that must be done, interns must reconcile the contradictory demands of learning and work. In order to do so, interns evolve a perspective which consists of a rationale permitting them to direct their efforts toward work rather than academic activities without subverting the value which legitimizes an internship. The intern is in the position of not only having to decide where he will put his effort but, once having decided to direct his effort toward patient care, he must also evolve a rationale for justifying the internship as an educational experience without participating extensively in academic activity. They do so by introducing aspects of learning into their work. They legitimize the direction of their effort by defining the situation in which they find themselves as one providing them with a great deal of clinical experience. When interns incorporate the idea of clinical experience as part of their perspective, they establish criteria to distinguish between "more valuable" and "less valuable" activities. The goal of an intern becomes to do all those things which provide him with clinical experience. This becomes the operating perspective of interns.

(6) The operating perspective may be summarized as follows:

a) An intern cannot do it all;

b) The work directly related to the problems of patients provides clinical experience which is desirable for physicians to have--therefore, an intern should direct his effort toward providing patient care;

c) If to provide patient care an intern needs more time, he can make the time he needs by reducing the effort he expends on academic activities.

(7) The initial and operating perspectives are evolved in terms of the ideas of medical responsibility and clinical experience, ideas which dominate any medical culture. Though responsibility and experience have been discussed as if perspectives are organized around each as a distinct idea, the ideas are not mutually exclusive. That is, the initial perspective emphasizing the idea of responsibility does not preclude aspects of that perspective reflecting the idea of clinical experience. The idea of clinical experience, around which the operating perspective is organized, obviously also does not preclude the idea of responsibility affecting interns' activities. The perspectives are, in fact, a simple variation of the two ideas applied to the situation at different times by interns to decide and justify what they have to do. When interns have responsibility for the first time, they answer the question of what and how much they should do by making maximum use of the idea of responsibility. Interns adapt the idea to apply to their immediate situation and build a perspective around the idea. The reality of their work soon calls into question the idea of responsibility as applied by them to their situation. There was, they came to think, such a thing as too much responsibility. When interns began to question the idea of responsibility, they had to make use of some other criteria to judge the value of the activities of an internship. They do not deny that they have responsibility but conclude that a perspective organized primarily around that idea does not allow them to set a realistic level of effort and does not tell them where they should direct their effort. Interns must operate in the hospital and the purposes of the hospital is the provision of patient care. Interns come to accept the provision of patient care as their primary responsibility. A perspective emphasizing the idea of clinical experience permits coordinating work with learning. Such a perspective makes it possible to distinguish between activities by which clinical experience

is obtained and provides a rationale legitimizing the expenditure of effort on patient care. A perspective organized around the idea of clinical experience also solves the problem of what their level of effort should be (get all the experience you can) and where that effort should be put (take care of your patients). The operating perspective, once established, is the customary way interns think about their work at the Boston City Hospital.

(8) The important implication of the idea around which perspectives are organized are their effects on the direction of interns' efforts. If the initial perspective were to persist, the direction of effort would be divided between patient care and academic activity. The operating perspective is eminently more practical. When interns finally set the acquisition of experience as their goal, they reduce the potential conflict between what they want to do and what hospitals are in business to do. The operating perspective of interns at the Boston City Hospital permits a way of thinking and acting which does not conflict with the purposes of that hospital.

(9) Sociologists who go into the field and talk to the people they study, sometimes get a bonus in the form of a colloquial phrase which points up a complex processworth sociological analysis. Many interns during their first few weeks at the hospital use the phrase "learning the ropes" to describe their experiences at the beginning of the year. Learning the ropes refers to the process of initial learning by newcomers in any social situation. It includes the learning of such things as who people are, where they are located, what they do, and what they expect a newcomer to do and how he should do what is expected of him. The process is one which we seldom dignify by calling it learning. Educators may attempt to cover the kinds of things a newcomer must learn in brief orientations but, from their point of view, it is inevitably an adjustment to the school,

hospital, or other organization expected of everyone. The newcomers who do not "learn the ropes" are more likely to receive attention than those who do. When newcomers successfully adjust, nothing more is thought about this part of their learning experience. The following questions were asked about the process of learning the ropes at the Boston City Hospital:

a) What are the ropes a newcomer must learn?

b) How are they learned?

c) Who teaches newcomers the ropes?

(10) The ropes the newcomer to the Boston City Hospital must learn are what his work is and how it must be done. It should be clear that ropes are facts about persons, places, and things which are relevant to mastering a situation. To learn the ropes is not only to become aware of these facts, it is also a matter of learning how to deal with them successfully. All interns must take the same first steps. These include identifying persons and groups which affect his progress, learning what they do and what they know which may help him and, if only by trial and error, how to interact with them properly. Success for interns entails the mastery of managerial skills apparently unrelated to graduate training in medicine. The intern learns the ropes by making a social map of his new surroundings and relating the actions of others to his own. The observation of the Boston City Hospital indicates that peers, subordinates, auxiliary personnel -- in fact, any frequent contact may become sources of situational learning. Moreover, interns are capable of considerable ingenuity in finding teachers. If those who should be their teachers are not available, they turn to peers; if peers are not available, they make use of subordinates; supplied with groups of superiors and subordinates, they tactfully exploit them all. The ingenuity of interns implies that they know that failure to learn the ropes may preclude learning anything else. If the intern does

not learn whom to consult and how to secure his help, he will not learn what the consulting physician can teach him about medicine. The ability to learn the ropes is closely related to successful negotiation of the training period. And, if there is a capacity for situational learning distinct from that of ordinary learning, as there may be, interns and others who fail in training may fail because they have not learned the ropes -- a kind of learning seldom included in the ordinary school curriculum.

(11) A factor of the teaching hospital's organization is that people periodically vacate the positions they have had and, at the same time, other people are recruited to fill the vacancies. Interns arrive at the hospital about the same time each year and leave the hospital or, at least, vacate their positions as interns at the end of one year. At the time of succession, when interns leave and others arrive, there is little time for orientation or indoctrination. The work of the hospital must go on. There is no way to halt the hospital's operations until the newcomers have learned the ropes they need to know to do their jobs. Interns are introduced to the vagaries of work and the ways of getting things done as they come face to face with the problems and duties of their job. The training program is structured so that succession and adjustment may take place with a minimum of difficulty. The Harvard Training Program is structured in a way which makes it relatively easy to learn the ropes. At the hospital, occupational groups, students and interns, with temporary positions at the hospital prepare each other for the work they have to do. The groups of people who are in the best position to teach the ropes are not, as it is often assumed, those who have been at the hospital for a long time but students who have only been there a month and the assistant resident who has been there a year. Students and assistant residents are the best teachers of the ropes. The intern learns the commonplace mechanics

of his work from medical students who have been at the hospital for at least a month. The assistant resident is a valuable source of information which interns need and, therefore, interns recognize their dependence as well as the authority of the assistant resident. The turnover of personnel which is characteristic of the teaching hospital is managed successfully by the Harvard Medical Services by overlapping the time these groups spend at the hospital, permitting them to teach each other the ropes.

(12) Interns must establish and maintain relationships with nurses and ancillary personnel at the hospital to accomplish the work of an internship. The M.D. degree enpowers interns to order the services of ancillary personnel but interns do not exercise the power they have. The relationships between interns and ancillary personnel are not relationships between people of unequal power. The nurses, aides, and technicians at the hospital have the advantage of interns because they know the rules and regulations as well as the usual ways of doing things at the hospital. For that reason, the relationship is an exchange. Interns tolerate omissions and delay of less important services and ancillary personnel reciprocate by providing the more important services when the occasions arise. Satisfactory relationships between interns and those people who are supposedly subordinate to them is critical for the accomplishment of work and the successful completion of an internship. Interns must establish egalitarian relationships with ancillary personnel because those people are teachers of the ropes and assist with the provision of patient care.

(13) Although interns on the Harvard Medical Services work in the shadow of the Thorndike Medical Laboratory which has on its staff many distinguished physician they do not receive a great deal of teaching from the established scientists and other physicians who are continuing their specialized educations or conducting

research at the Boston City Hospital. There can be no doubt that the staff physicians constitute an enviable pool of expert opinion in almost every field of medicine. Working under the supervision of physicians such as these is often thought to be the major benefit of serving university-affiliated internships. But there does exist a conflict between the interests of interns and those of the scientists and specialists. What interns must do is provide routine patient care. The patients they must care for, however, are not always interesting to scientists and specialists. That is, the routine problems of patients do not lend themselves to the interests of scientists and provide little additional experience for the specialist. Interns must induce the staff physicians to teach by presenting them with patients that are interesting or problems which provide clinical experience. The interests of scientists and specialists, therefore, determine the content of teaching.

(14) Teaching is done by assistant residents who have only one more year of experience than do interns. The bulk of the work of an internship is supervised by residents and interns were taught most of what they learned by residents--not as is usually supposed by established physicians. The relationships between interns is also crucial for learning. Interns exchange among themselves the knowledge they obtain during the year. The intern must exploit the visiting and consulting physicians for information he wants and, when the occasion arises, share it with his fellow interns.

(15) There were some important differences between the work of an internship at a community hospital and that at the Boston City Hospital:

a) Interns at the Boston City Hospital spent almost twice as much time managing their medical setting. Most of the difference between hospitals could be attributed to the amount of time that interns had to spend running around the hospitals locating equipment and obtaining services. Interns at the Boston City Hospital had to do more for themselves to expedite their work.

b) There were no medical students at the community hospital and, therefore, interns at that hospital spent no time instructing students or supervising student care of patients. Interns at the Boston City Hospital were observed to spend almost five per cent of their time teaching or supervising medical students.

c) Interns at the two hospitals did not work-up patients in the same way. There was a significant difference between the ways in which interns at the two hospitals work up their patients, though they spent about the same amount of time doing so.

d) Interns at the Boston City Hospital spent significantly more time preparing for the delivery of medical care. This was attributed to the lack of ancillary staff at that hospital.

(16) Though the actual work of an internship at the two hospitals was much the same, important differences were observed between the groups. The differences that were observed to exist are not so much due to the nature of the work itself as it is to conditions at the two hospitals and the purposes of the physicians conducting the two training programs. The fact that the primary purpose of the Harvard Medical Unit is clinical investigation and not teaching results in interns there being taught by residents rather than full-fledged physicians. Interns at the community hospital were taught by practicing physicians. A situation of this sort is not unlike that of undergraduate students who are taught by graduate students rather than faculty. The lack of ancillary staff resulted in interns at the Boston City Hospital having to do more of the routine work of patient care

than the interns at the community hospital had to do. These two facts accounted for the observed differences between the educational experience of interns at a community hospital and that of interns at the Boston City Hospital.

(17) The educational experiences had by Harvard interns resulted in a significant increment in medical knowledge and clinical competence as measured by the Part III Examination of the National Board of Medical Examiners. Interns did add significantly to what they knew about medicine and improved their clinical judgments in the management of patients, though no significant change was discerned in their ability to note and interpret the physical signs observable in patients.

BIBLIOGRAPHY

There are 74 references listed in the final report. Also, there are 165 excerpts from field notes or interviews with medical students, interns, and residents.